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# **Netball Central Architectural and Landscape Design Statement**

**Issue** **Project Application Issue** Revision A

**Date** **15 June 2012**

**Project  
Number** **20100036**

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**Prepared for**

Netball NSW

Anne Clark Centre, Church st, Lidcombe NSW 2141

**Submission Status**

Preliminary - Issue for Comment

H:\2010\20100036 Netball Central\Reports\20100036-ProjectApplication-PlanningIssue.indd

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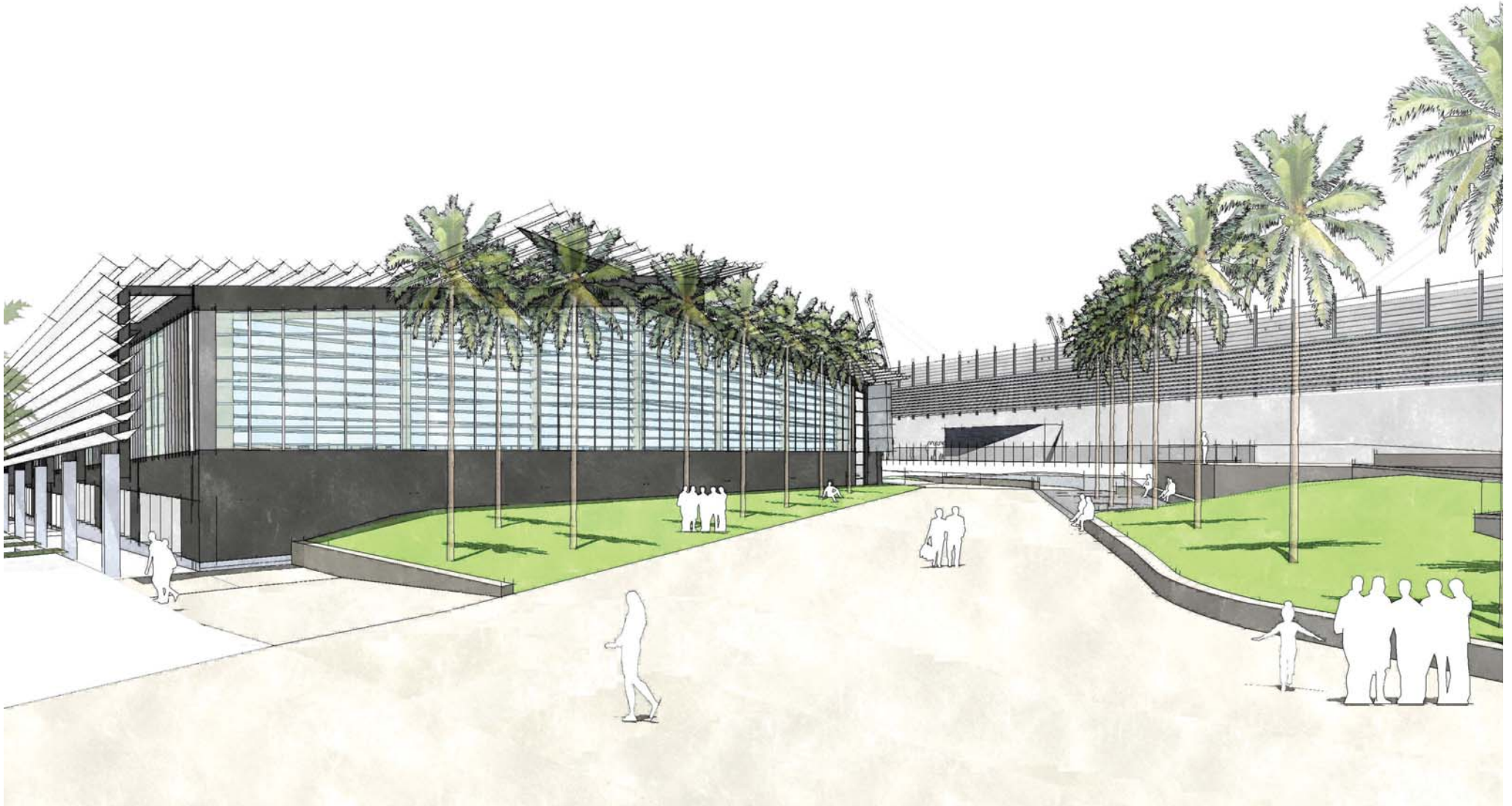
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Northern Elevation of Netball Central as viewed from the Olympic Boulevard

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# 1 Architectural Design Statement

The design for Netball Central addresses an array of issues regarding its siting and appearance while also satisfying the functional brief for the operation of the centre.

Significant agendas informing the design include:

1. Satisfying the Functional Brief for the centre such that operations are optimal through time and that Netball NSW brand is augmented positively;
2. The need to create a building of architectural excellence appropriate to its' site on Olympic Boulevard;
3. The need to create a shared address for the Sports Centre and Netball Central on a site that precludes both buildings having individual entries onto Olympic Boulevard;
4. The need to satisfy urban design standards required by the Sydney Olympic Park Master Plan 2030;
5. The need to deploy a demanding budget to design resolution that appropriately balances priorities to Netball NSW needs.





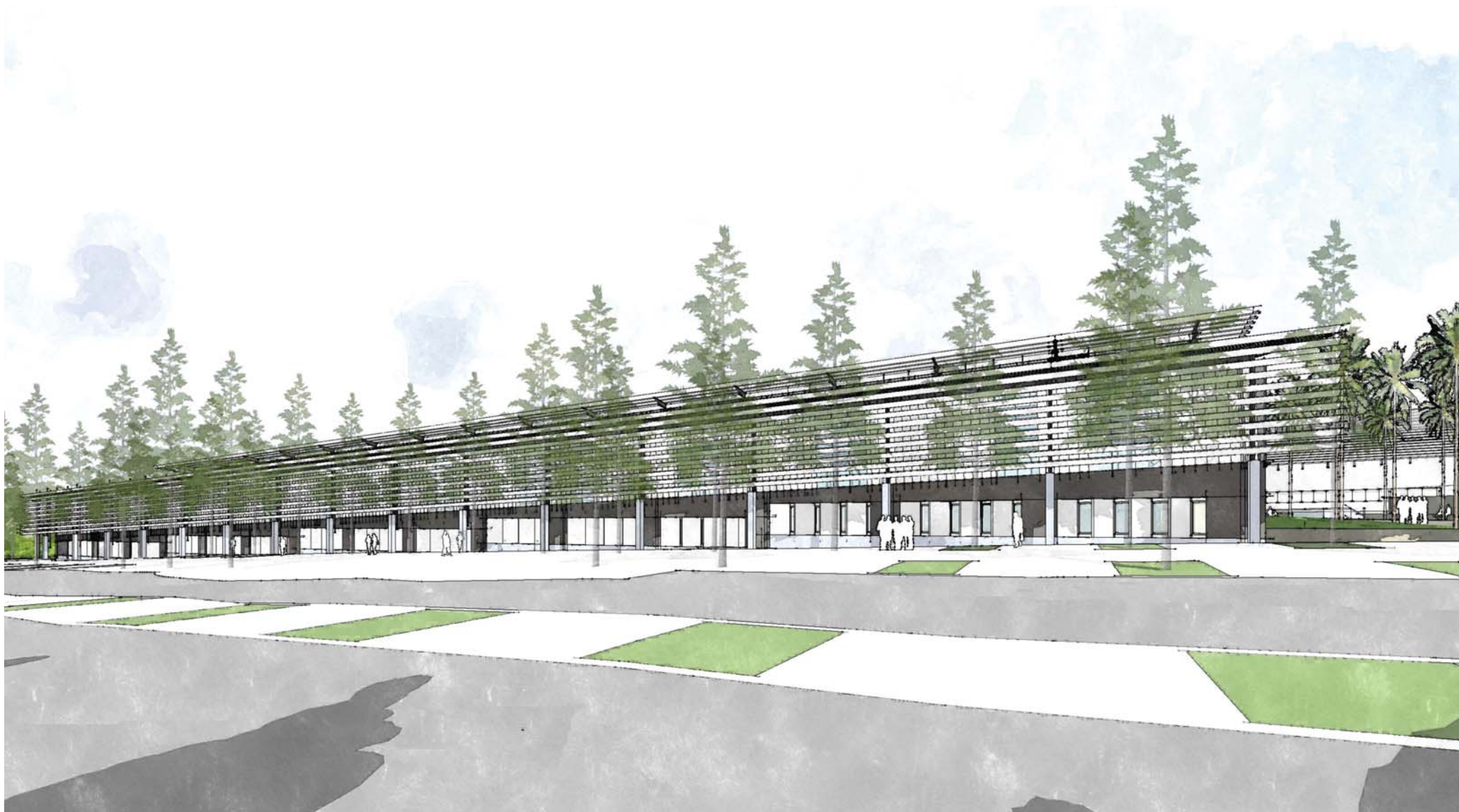
Aerial sectional cut through Netball Central

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Significant features of the design are as follows:

- The building footprint is reasonably inflexible by virtue of the fixed sizes of the courts and the limited number of ways the courts can be arranged to work together. The courts are arranged around a compact 'hub' of amenities and administration. This hub is located centrally to the 5 standard courts and immediately adjacent to the show court.
- Both the courts and the hub have been minimised in their overall size as much as possible while still satisfying the brief.
- The 5 standard courts have been arranged along an organizing and socializing 'spine' / 'internal street' that connects the hub with the courts.
- The building follows the topography, down the slope of Olympic Boulevard towards the south. This keeps the building engaged with the public domain of Sydney Olympic Park and presents a continuous opportunity for visual connections into and from the courts.
- The inevitable bulk of the building has been located as far south as is practically feasible in order to create a shared entry and breakout space at its northern end. This space becomes the shared address of both the Sports Centre and Netball Central.
- Although comprised of simple portal frames, the 5 standard courts have been designed to afford a sufficiently civic stature to its frontage on Olympic Boulevard.





Olympic Boulevard Netball Central elevation



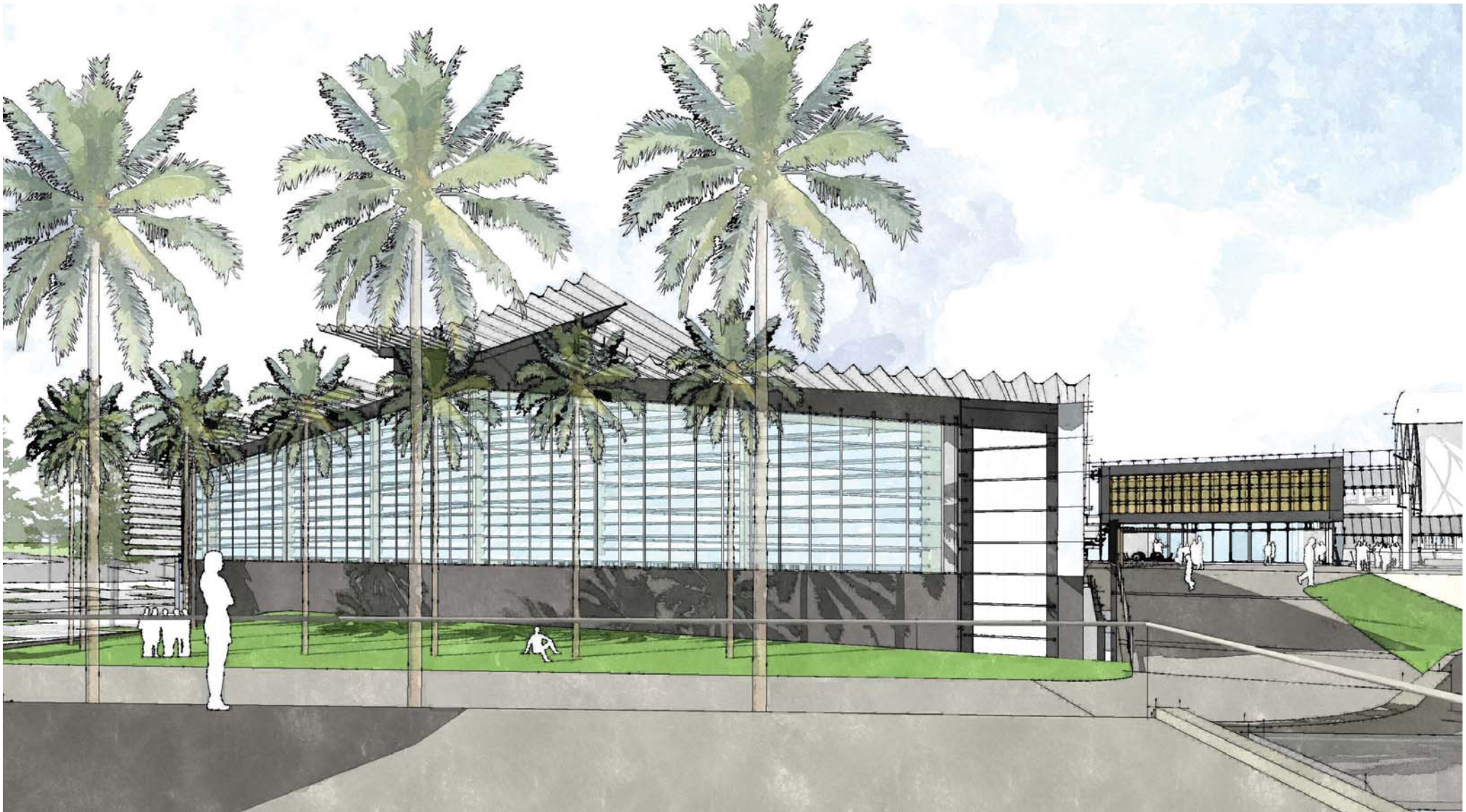
- Netball Central has been designed to exacting standards of sustainability and its architecture reflects and dramatises this agenda:
  - The Olympic Boulevard frontage at pedestrian level comprises operable windows that serve to supply ventilation to the standard courts;
  - The roofs of the courts 'breathe' along the ridge line and cantilever beyond the building as though reaching out into the environment;
  - The rainwater is managed by dramatic roof lines to descend through a medley of downpipes at the southern end of the centre;
  - The structure is made substantially of timber, which is a renewable resource with its own sequestered carbon dioxide.
- The east and north facades are to be clad in cellular polycarbonate in order to maximise the transmission of daylight and increase the sense of openness within the court zones. Sun shading screens inhibit the trespass of sunlight directly onto the courts.
- On the east facade these sun shading screens take the form of metal profiles that match the roof sheeting, positioned on the outside of the colonnade, thereby also enhancing the dramatic scale of this thoroughfare.
- On the north façade LVL timber louvres are positioned inside the polycarbonate, preventing the trespass of direct sunlight. In this situation the broad eaves keep direct sun from the façade in summer, while the winter sun is directed into the building during the winter with a beneficial warming effect.
- Tilted slightly up, all of these sun shading louvres allow filtered views into the building from outside while still excluding the sun. This louvre geometry will present the building as a lantern at night when viewed from the public domain and urban places adjacent. This is an important consideration given the intense use the building will enjoy in the early evening during winter.

These design elements bring a gentleness to the monumental form of the building. The absolutes and specificity of elite competition; boundaries, lines, rules, scores, winners, losers, competition, focus and aggression, are contrasted with a counterbalancing, more general imprecision of a warm modern building that speaks of light, depth, ambiguity, translucency, transitions, seamlessness, luminance, ambience, atmosphere, tactility, charm, respite and conviviality.



Southern Elevation of Netball Central viewed from the Olympic Boulevard





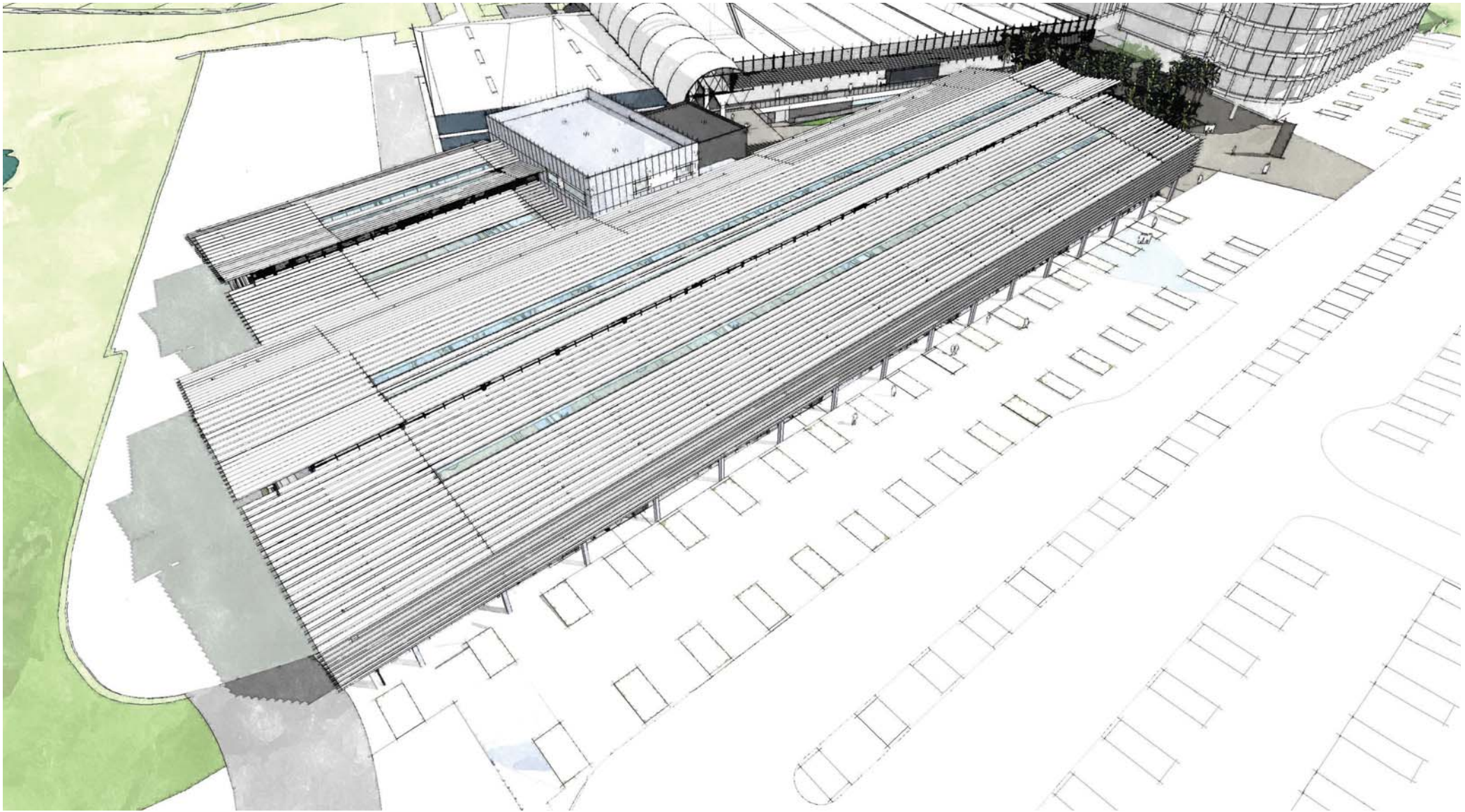
Netball Central's Northern elevation from the shared public approach with view through to the Sports Centre and Netball Central entries.





Netball Central Hub and main entry





Netball Central Aerial



Shared Public Approach to Sports Centre and Netball Central



# 2 Landscape Design Statement

## General

The proposed venue forecourt is located on Olympic Boulevard at the north eastern end of the proposed Netball Central building. The forecourt is split into three distinctive areas:

1. Lower Forecourt
2. Forecourt Ramp and Sports Centre Administration Ramp
3. The Upper Forecourt

All of these forecourt areas smoothly link together to equitably direct users to all relevant entries through consistent materials, way finding signage, safety | feature lighting, and carefully designed soft scape gradients and species.

The Forecourts have been designed in conjunction with the Sydney Olympic Park Urban Elements Design Manual (UEDM) and the Sydney Olympic Park Master Plan 2030. Hard scape materials have been generally sourced from the UEDM. However, some non UEDM materials have been proposed within the forecourt to compliment the materials of the surrounding buildings and to create a 'special place and venue entry'. Where possible, the soft scape species will carefully be selected from the Auburn Council Species list and research has been undertaken to guarantee all transplanted of the 16 existing Palm Trees will grow successfully in their proposed locations.

## Lower Forecourt Design

The lower forecourt space achieves a strong sense of entry to both sports venues due to the proposed removal and relocation of 14 Hoop Pines that are currently located in front of the forecourt on Olympic Boulevard. The space is also relatively flat with a gradient of 1:40 allowing visitors to meet, congregate, wait, stand and sit on seating walls or battered grass surfaces during event and non event days.

The lower forecourt entry angle originates from the foot traffic desire lines that are evident during event days, from the P3 car park and the railway station. At the same time, the angle takes visitors on an unambiguous and equitable route towards both the Sports Centre and Netball Central.

Grass batters flank both sides of the pedestrian zone with palm trees located in a linear and directional fashion. These not only provide

accessible seating in sunny and shady areas. but also provide a corridor of green that softens the surrounding buildings at an integrated human scale.

An extra seating area off the main thoroughfare is outlined by a change in material and allows people to gather and sit, outside the line of pedestrian flow.

The lineal palm trees (*Livistonia australis*) illustrated on the lower forecourt currently exist on site and are proposed to be transplanted. Their clean trunks maintain visibility, legibility, and way finding through the forecourts, and also maintain the palm tree legacy for the venues.

## Forecourt Ramp

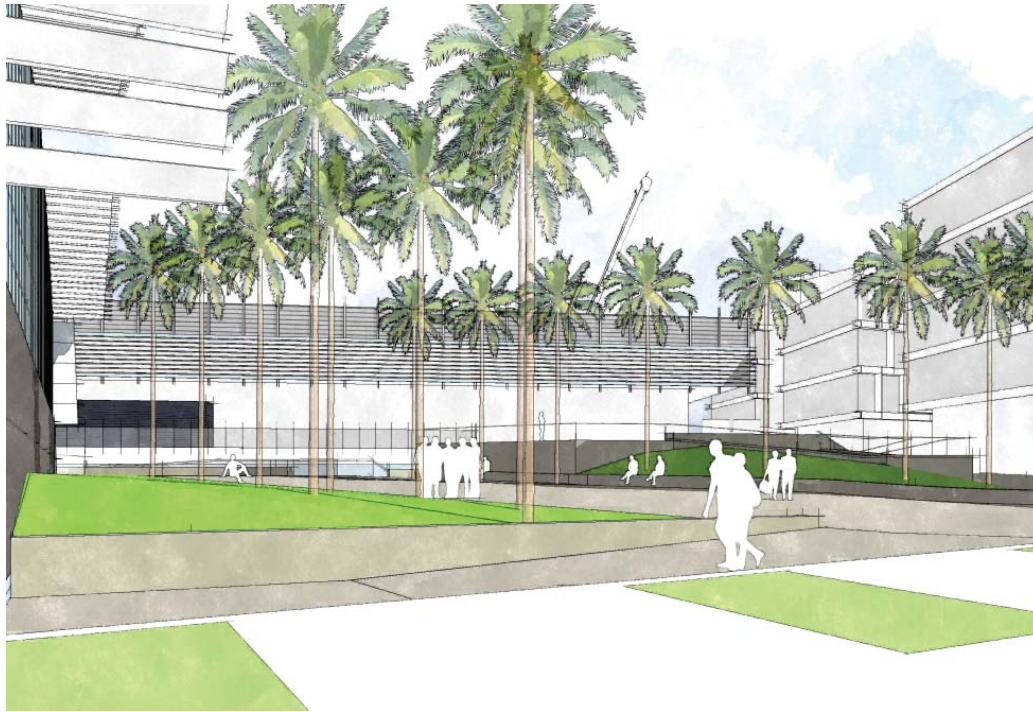
This ramp will act as a link between the lower forecourt and the upper forecourt. It is to be 5m wide at its pinch point, and will be supported remodelled fill.

This ramp widens on its approach to the upper forecourt to allow the volume of foot traffic to ease through the turn towards the Sports Centre's upper entrance. The location and line of the ramp allows light to reach the existing administration windows at the mid level of the Sports Centre.

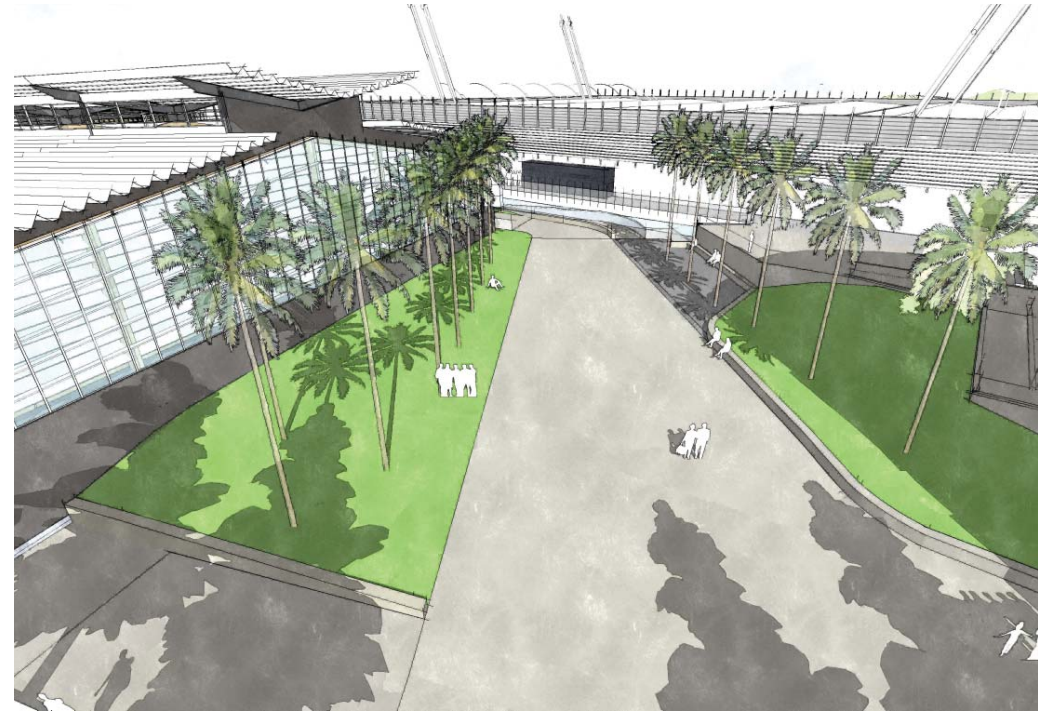
This ramp will be at a maximum gradient of 1:20 with all the compliant landings. A 1:3 batter of native shrub planting will soften the entrance and provide visual interest for visitors and the Sports Centre Administration offices.

## Sports Centre Administration Ramp

This ramp acts as an accessible route to the Sports Centre mid level entrance serving the administration offices. The entrance to this ramp begins adjacent to forecourt ramp but is outside the general flow of pedestrians and therefore is secondary to the major event spectator flow. This ramp has a 1:14 gradient at 9m maximum lengths, with all the compliant landings. It will be constructed from light weight structure.

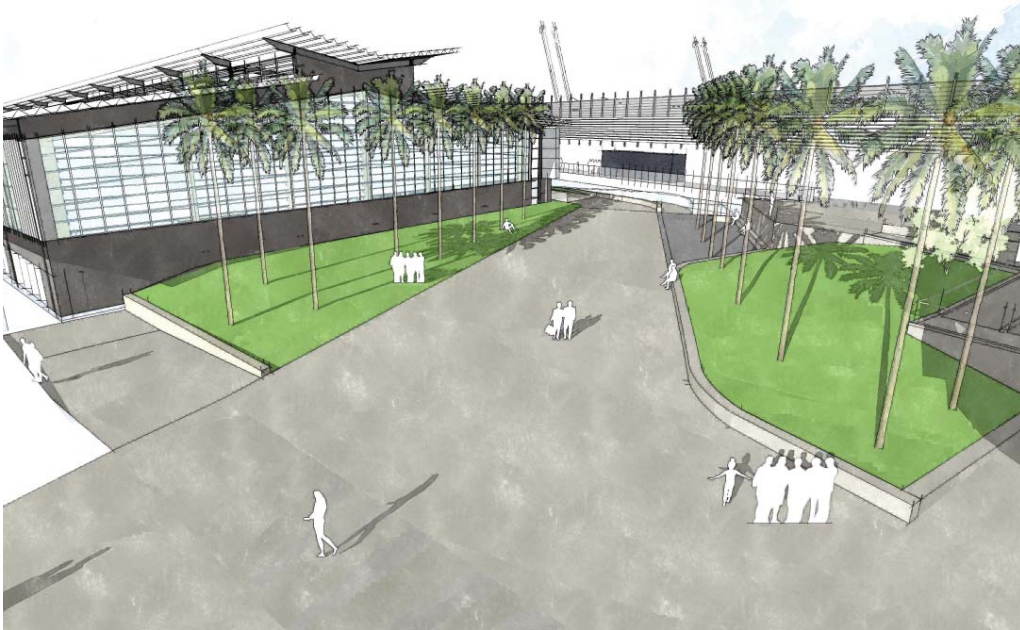


View looking north west at sculptural precast 'fan' wall adjacent to the terraced forecourt.



Aerial View of the shared terraced forecourt





Aerial looking south west

## Upper Forecourt

The upper forecourt is an entry platform for the Sports Centre and Netball Central. The platform provides a shared space addressing the entrances of both facilities, achieving an equitable relationship between the two. The Upper Forecourt boasts expansive open space for crowds to circulate and queue during larger events, while at the same time providing shaded break out seating adjacent to the Netball Central Cafe.

## Lighting

The lower forecourt, forecourt ramp and upper forecourt will be a mixture of building mounted, handrail mounted and feature LED's to achieve the compliant P ratings for security during event and non event times.

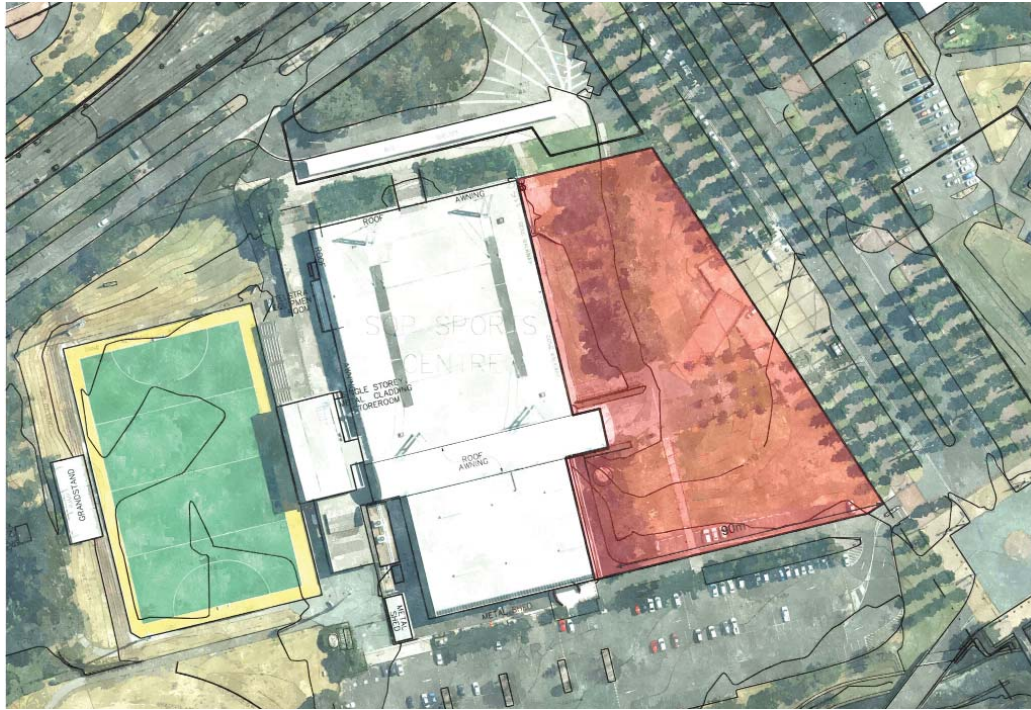
Directional lighting will allow visitors to follow a safely lit path to and from all venue entry's. While uplighting to the transplanted palm trees and illumination to the ramp edge with LED strips, will create an energetic ambience within the forecourt entry.

## Soft Scape

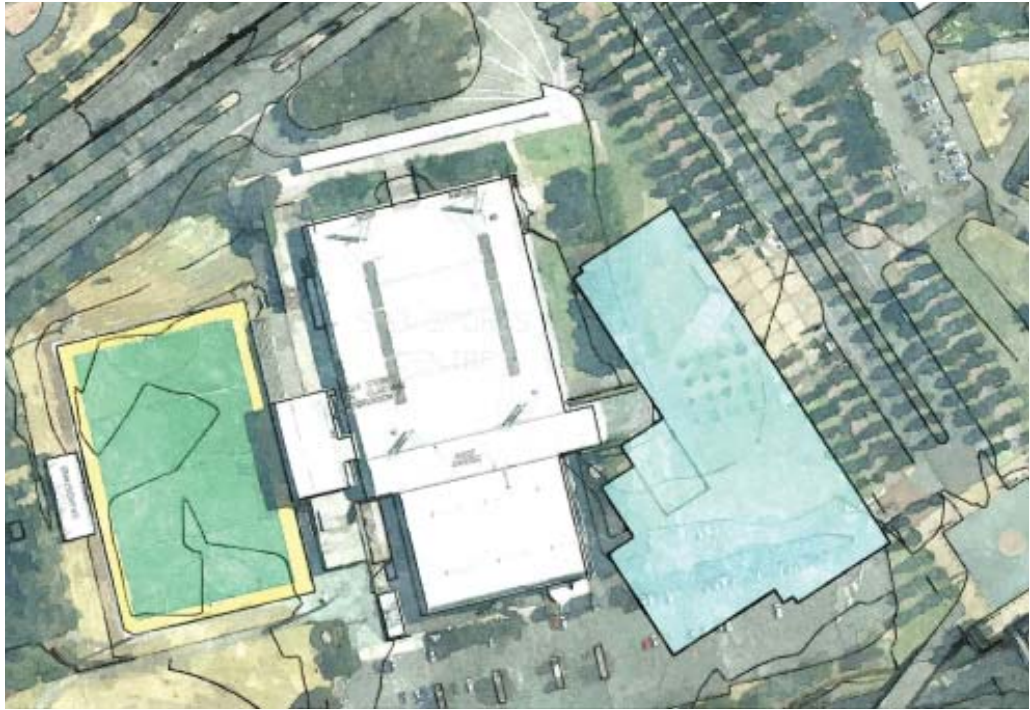
16 existing palm trees that are located on the current forecourt entry are proposed to be removed and relocated in a lineal fashion to the new lower forecourt

14 Hoop pines that are directly in front of the proposed forecourt location on Olympic Boulevard are proposed to be removed to allow direct views of the entry and relocated further south along the boulevard to fill in the gaps in trees that currently exist.

The forecourt planting will be a mixture of turf and native shrub planting. The turf will provide accessible seating and resting areas during the day with a max grade of 1:6 to comply with OHS. The areas of mass shrub planting will provide visual interest for pedestrians and along the entry journey and act as a soil stabilizer for the 1:4 batters. Special consideration will be given to all soft scape species to ensure liveability and durability. Height of species will also be considered to comply with Crime Prevention through Environmental Design (CPTED)



Site 107 as identified on Figure 5.54 Southern Sports Precinct Site Boundaries Plan



Proposed Netball Central building Footprint

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## 3 Deviations from Master Plan 2030

### 3.1 Site Boundary

The Master Plan 2030 identifies Site 107 on the Land Uses Plan (Figure 5.56) as a 'Venue Expansion Zone'.

Early in 2011, Site 107 was allocated as a development site for a Netball Centre of Excellence by Communities NSW - Sports and Recreation and Sydney Olympic Park Authority.

Netball Central will be a separate, independent structure adjacent to the existing Sports Centre, rather than an extension to this building.

#### Sports Centre Requirements

To enable the Sports Centre to continue to function independently of the new development, a number of the Sports Centre's elements / functions have had to be maintained, including:

1. Olympic Boulevard public connection and address
2. the existing 2 No. public entrances (Note: As there is no accessible access internally within the Sports Centre between its' upper and middle levels, both of the existing entrances have had to be retained.)
3. the extensive egress width requirements along its' eastern frontage
4. the loading bay accessed from P7 car park
5. the existing fire services running along the eastern side of the existing loading bay
6. solar access to the administration offices on the eastern facade (middle level of the Sports Centre)

In order to ensure the maintenance of all the above, the Site 107 site boundary has had to be reviewed.





Aerial view of the shared public forecourt



View of the shared public forecourt from Olympic Boulevard



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## Provision of shared Venue Forecourt

The footprint of the Netball Central facility has been slid to the south to enable the creation of a shared public forecourt to serve both the Sports Centre and Netball Central. This forecourt will provide a prominent address for both the Sports Centre and Netball Central on the Olympic Boulevard.

Early in the design process, it was determined that the Netball Central entrance should stand along side that existing Sports Centre's barrel canopy. This was a key decision to ensure that the new facility engaged with the Sports Centre, and presented an activated facade to the Sports Centre.

The shared forecourt will also form an essential role for both the Sports Centre and Netball Central, by providing break-out out space. School groups will be able to enjoy the forecourt during lunchtime breaks, and spectators arriving for an event will be able gather to meet friends before entering the venues.

The shared Venue Forecourt has been located to the northern end of Site 107 in order to form the first point of contact with those approaching from the railway station to the north, and P3 car park to the eastern side of Olympic Boulevard. The design for the forecourt has been developed to ensure that it also addresses the break out areas associated within the cafe to the south eastern corner of the future development on Site 13.



Netball Central aerial looking south

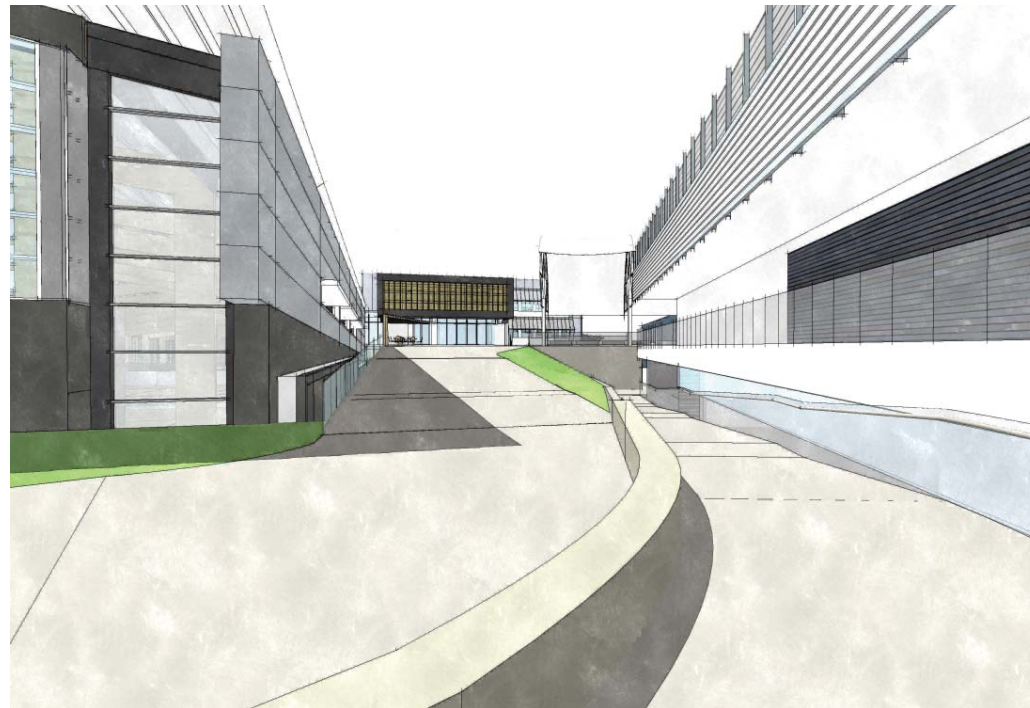
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### **Provision of separation between existing and proposed structures**

Items 4, 5, and 6 have been maintained by pulling the western boundary away from the Sports Centre, ensuring that the Netball Central development does not clash with these elements.



Upper Sports Centre and Netball Central entrances



Sports Centre Administration entrance via colonnade formed by bridge serving upper entrances



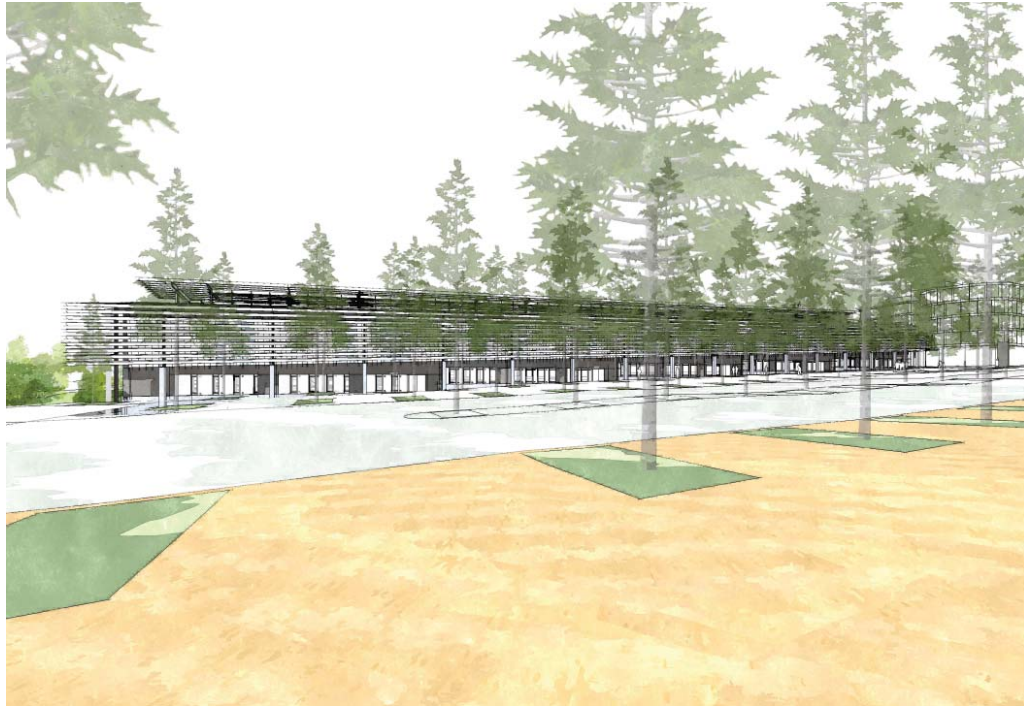
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## **Split Ramp Entry**

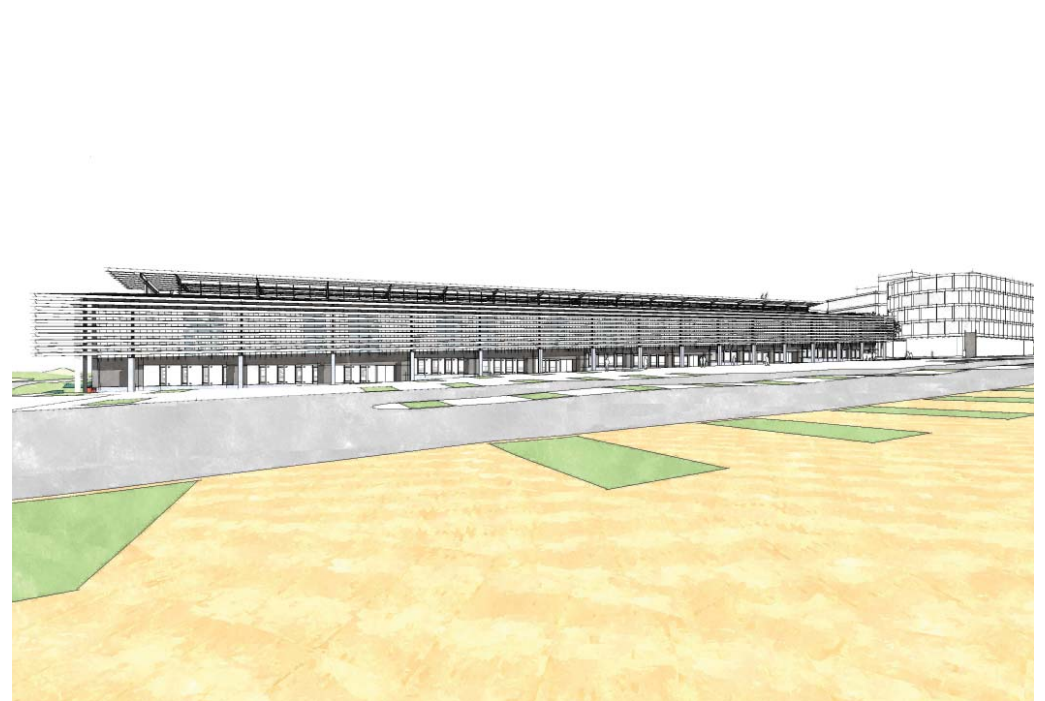
Access to the Sports Centre's existing 2 No. Entrances is achieved by splitting the ramped approach adjacent to the north western corner of the Sports Centre. This split ramp configuration ensures that all building users, whether able bodied or disabled, take the same route to the various venue entrances. It should also be noted that the decision point for split ramps occurs only once all of the venues' entrances are visible to visitors, thereby achieving clarity to the journeys being undertaken.

## **Split Egress**

In order to reduce pressure on the pinch point between the north western corner of Netball Central and the Sports Centre, the egress width from the main upper entrance to the Sports Centre has been split between the Forecourt Ramp (to the north) and a stair down to the Loading Bay (to the south). This stair will also provide an access route for users of the P7 car park, up to the Upper Entrance.



Netball Central Olympic Boulevard elevation



Netball Central Olympic Boulevard elevation (No trees for building form clarity)

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## 3.2 Building Height

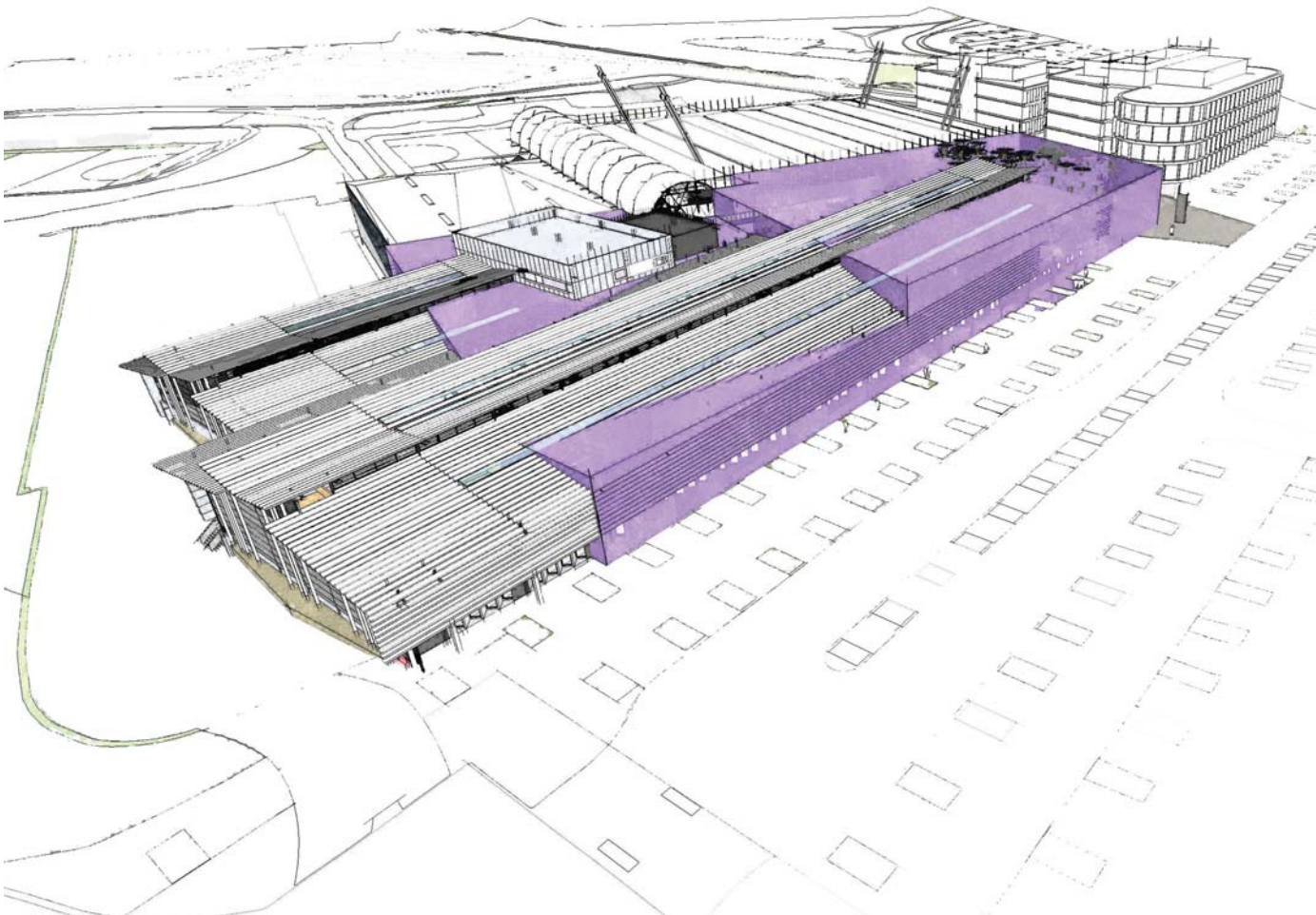
The Master Plan 2030 identifies Site 107 on the Building Heights Plan (Figure 5.57) as AHD 24 to the north of the existing Sports Centre's barrel canopy, and AHD 19 to the remainder of the site. These appear to have been defined in accordance with the Master Plan 2030 identification of Site 107 as being an extension of the existing Sports Centre, rather than as an independent building.

### Standard Court Hall

The configuration and levels of Netball Central have been set to directly complement the Olympic Boulevard and the existing Sports Centre. The courts along Olympic Boulevard have been stepped to follow the existing fall from north to south along the Boulevard. This enables the lower levels of Netball Central's Olympic Boulevard facade to have a direct interaction, on a human scale, with pedestrians passing along the facade. Particular attention has been made to introduce glazing at this lower level, with angled blade walls allowing intermediate glazing to provide clear visual links between the exterior and interior, without the trespass of direct sunlight on to the court surface. [Note: This approach is in keeping with the aspiration of 4.3 Public Domain, which under 'Ground Floor of Non-Residential Buildings' states that "to ensure ground floor facades appeal to pedestrians and contribute to the town's liveliness and security ... (developments should) ... activate ground floor levels ..."]

The Netball courts to be housed within Netball Central are to comply with International standards in order to accommodate the elite games to be played at this venue. These standards require a minimum clear height of 8.3m above the court, and a minimum clear run-off zone of 3.05m around all four sides of the courts. This equates to an overall clear length for the courts of 37m.

In order to achieve the large, clear spans required to accommodate the Netball courts, large LVL (Laminated Veneered Lumber) portal frames have been selected. These portal frames provide a structurally efficient, cost effective, and sustainable solution. However, the combined effect of i) enabling there to be an interaction between the pedestrians along the Boulevard with the interior, ii) providing the required clear height, and iii) providing a roof structure capable of the required spans, the overall height at the centre of the standard court hall exceeds the AHD 19 and 24 heights.



Netball Central aerial looking north

Master Plan 2030 Building Height Limits



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## **Olympic Boulevard Elevation**

The use of the LVL portal frames reduces the impact to the Olympic Boulevard of the height of the standard court hall, by decreasing in height at the 'knee' of the portals. Therefore, Netball Central's Olympic Boulevard Elevation complies with the AHD 19 and 24 building height restrictions along its' full length.



North-West corner of the 5 Standard Courts leading to Netball Central and Sports Centre Public Entries.

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## Hub Entry / Parapet

The parapet of Netball Central's Hub, exceeds the AHD 19 height limit to the south of the Sports Centre's barrel canopy.

As noted previously, the configuration and levels of Netball Central have been set to directly compliment the Olympic Boulevard and the existing Sports Centre. With regards to the Sports Centre, the entry to Netball Central has been located to sit side by side with the barrel canopied entry at the Sports Centre's upper level. This placement of Netball Central's entry adjacent to the Sports Centre's public, event entrance enables the 2 entrances to compliment and strengthen each other with their shared approach. This has resulted in Netball Central's entry being located at Level 3 of the Hub. [Note: Level 2 relates directly to the Olympic Boulevard via the central standard court, and Level 1 relates to the loading / P7 car park to the south western corner.]

Netball Central's Entry / Reception and Administration functions have been split over 2 levels, with Entry / Reception at Level 3 and Administration at Level 4. These top 2 levels are formed from a large form to the rear half, with a projecting mass formed by the northern section of the Level 4 administration. This projection appears to float over the Level 3 Entrance, which is formed from a glazed enclosure. This floating effect is reinforced by the solid, white blade walls (where required) adjacent to the Level 3 Entrance stopping short of the projecting form.





- Hub
- Circulation 'Spine'
- Standard Court Hall
- Show Court
- Colonnade

Sectional cut through the 5 Standard Courts, Show Court and Hub.

## 3.3 Colonnade

### Master Plan 2030 Controls and Guidelines

#### 4.3 Public Domain [General Controls and Guidelines]

This section states;

*22. The colonnade width is to be 4m except for the colonnades to Sites 20, 21, and 22 which are to be 3m.*

*23. For continuity, the height to the colonnade soffit is to be consistent along the entire block.*

The Awnings and Colonnades Plan (Figure 4.2), indicates that the Olympic Boulevard frontage of Site 107 is designated to have a Street Colonnade 1 Storey (Minimum 4.2m High).

#### 5.8.7 Building Zone and Setback Controls [Southern Sports Precinct Controls and Guidelines]

This section states;

*1. Site development, including permissible building zones and open space, shall be in accordance with the 'Building Zones and Setbacks Plan (Figure 5.58).*

For Site 107, this plan states that the development must build to the line of the boundary.

Street 2 Olympic Boulevard South [Appendix C - Street Plans and Sections]

Height

- The eastern side of the street will be well defined by a consistent wall of new six to eight storey podium building, including ground floor colonnades, with point towers up to 30 storeys high at intervals along the boulevard.*
- The western side of the street will retain a more open and mixed character, with maximum five storey high buildings, forecourts to sports venues and a ground floor car park.*

Setback

- No setback required.*

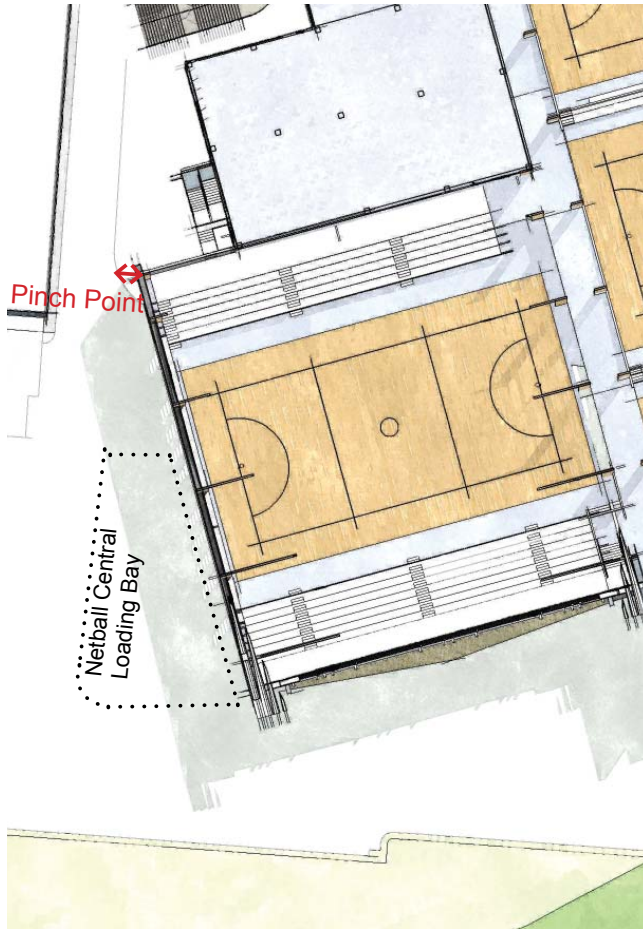
### Netball Central Brief

As a Netball Centre of Excellence, Netball Central's brief requires it to house 5 No. Standard Courts and 1 No. Show Court, which all comply with International Standards. The spatial requirements for International Standard Courts include:

- Court Playing Surface: 15.25m(w) x 30.5m(l) x 8.3m(h)
- Minimum Clear Run-off to all 4 sides of Court: 3.05m (Note: No encroachment is permitted into this space. It is required to provide the Line Umpires with a clear space to run safely along the side line while watching play, in the knowledge that no obstructions will be in their path.)
- Sponsorship Signage Zone to all 4 sides of court: 500mm (Note: This Signage Zone is to be provided around the Show Court only. Due to spatial constraints of the site, where possible the Signage Zone has been doubled up with structural depth zones.)

Various configurations were investigated during the initial stages of the design process, in order to identify the most efficient and appropriate arrangement for the 6 No. court zones. This process proved challenging, given the inflexible footprint of the rectangular courts and the triangular nature of Site 107 in front of the existing Sports Centre. However this process identified a configuration which provides a clear programme to Netball Central's internal layout. The Standard Courts run along the Olympic Boulevard and achieve visual interaction with pedestrians within the public zone of the Boulevard. The Show Court is located on the opposite side of the facility's organisational / socialising 'spine', achieving an appropriate sense of individuality and grandeur.

The facility's central 'spine' has been designed to provide sufficient space to accommodate the flow of spectators and players simultaneously arriving and leaving at the change over times between games. This 'spine' also forms a socialising and team briefing function, with seating niches drawn off to the western side. The areas between the large LVL portals (required to achieve the clear spans across the courts), provide zones where spectators /



Pinch point at North Western Corner of the Show Court



Pinch point between the North Western Corner of the Standard Court Hall and the Sports Centre



players can linger to watch the end of the preceding game, without blocking the main circulation route.

LVL portals have been selected to achieve the clear spans required to accommodate the length of the courts. This approach to the primary structure meets the facility's budgetary and aesthetic requirements, and are fundamental to the architectural language of the design. The 1200mm depth of the column sections provide an appropriate scale to the large volumes of the court halls.

The combined overall width of the building at its' widest east / west point is 82.2m. This combined dimension is calculated by the addition of the following zones from the Olympic Boulevard (east) to the P7 Car Park (west):

- Structural / Visual Interaction / Sun Shading / Natural Ventilation / External Cladding Zone = 1.25m
- Clear Length of Court 5 = 37m
- Circulation 'Spine' = 4m
- Structural Zone (which accommodates the Signage Zone to the eastern end of the Show Court) = 1.2m
- Clear Length of Show Court = 37.5m (Note: This dimension includes the Signage Zone adjacent to the western external wall.)
- Structural / Sun Shading / Natural Ventilation / External Cladding Zone = 1.25m

## Pinch Points

To the north western corner of the Show Court:

- an egress width of 2.5m is required to enable those using the external egress stairs (1.5m) and the Level 1 Hub egress (1m) to vacate the immediate vicinity. Access stairs will be provided from this area to the Sports Centre's loading dock to enable people to get away from the building as quickly as possible.
- The bin store will also open on to this area, in order to ensure that the bins are concealed from view relative to the P7 car park. Due to the relative level of the Sports Centre's loading area and Netball Central's Level 1, the bins cannot be wheeled on to the Sports Centre's loading area. Sufficient width will therefore be required between the Show Court and the upstand wall to the Sports Centre's loading area, to allow the

1100L bins to be moved around to the loading bay for waste disposal.

To the north western corner of the Standard Court Hall:

- As has been discussed previously, care has been taken during the design process to accommodate the existing egress requirements of the Sports Centre and to provide equitable access for all building users. This has been particularly challenging at the pinch point between the north western corner of the Standard Court Hall and the Sports Centre. While this has been achieved through the provision of a split ramp configuration, attention has been made to ensure that sufficient space is provided to either side of these ramps and the adjacent buildings. This has been necessary to;
  - allow the ramps to retain an independent identity and architectural language, to enable it to be read as shared public elements, separate from both facilities.
  - provide a gap between the ramps and the Sports Centre's upper concourse to allow daylight access to the Sports Centre's Administration Offices at it's mid level.



Olympic Boulevard colonnade  
as proposed.



Olympic Boulevard colonnade  
with concrete column moved to  
site boundary.

Colonnade Space

## Colonnade

The Olympic Boulevard site boundary of Site 107 runs along the western edge of the planters surrounding the Boulevard trees.

The eastern edge of the sun shading louvres to the upper level of the Olympic Boulevard Elevation have been aligned with the site boundary in compliance with the build to line requirements of the Southern Sports Precinct Building Zones and Setbacks Plan (Figure 5.58). These sun shading louvres and associated structure immediately adjacent to the site boundary, create a colonnade along the Olympic Boulevard facade.

The colonnade space is terminated by the projection of the Standard Court Hall Roof. The soffit of this roof eave provides a consistent height to the full length of the boulevard facade, in compliance with item 23 under 4.3 Public Domain.

The colonnade's western edge is enclosed by the external wall of the Standard Court Hall, with an interplay of angled fixed blades and glazing at low level to enable visual interaction. The external face of this wall is set 2.8m to the west of the site boundary, with the angled blade wall niches extending to the west.

Due to the tight and triangular nature of the site, Netball Central's colonnade does not comply with requirements of item 22 of Section 4.3 Public Domain. This has resulted from the particular and uncompromising demands of:

- Netball Central's Centre of Excellence Brief, including the International Standards for Netball courts
- The separate identity and architectural language appropriate for a shared public approach to the Sports Centre and Netball Central
- The extensive egress requirements of the existing Sports Centre
- The egress requirements to the north western corner of the Show Court in order to ensure safe egress of occupants in an emergency
- The daylight access requirements for the Sports Centre's Administration offices

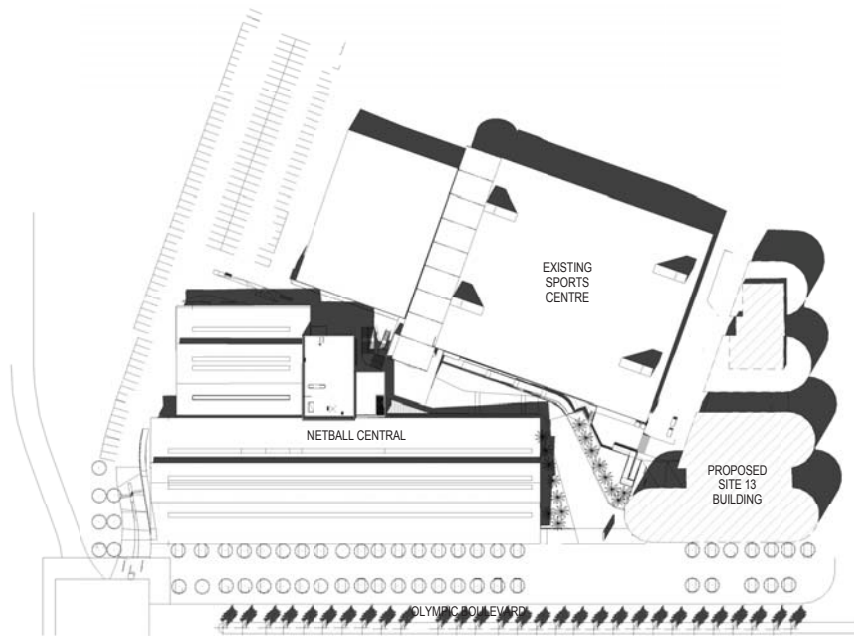
While the colonnade width does not comply with the requirements of item 22 of Section 4.3 Public Domain, the columns supporting the sun shading louvres have been designed with a concrete base immediately below the louvres, with a steel column at high level. This enables the pinch point at pedestrian level between the colonnade columns and the building facade to be increased, rather than bring the steel column all the way to the ground. This ensures that there is sufficient space to enable pedestrians, wheelchair users, and pushchairs heading in opposite directions to pass.

Consideration has been made as to whether the concrete column could be relocated to sit immediately adjacent to the site boundary, however this has not been incorporated into the design due to:

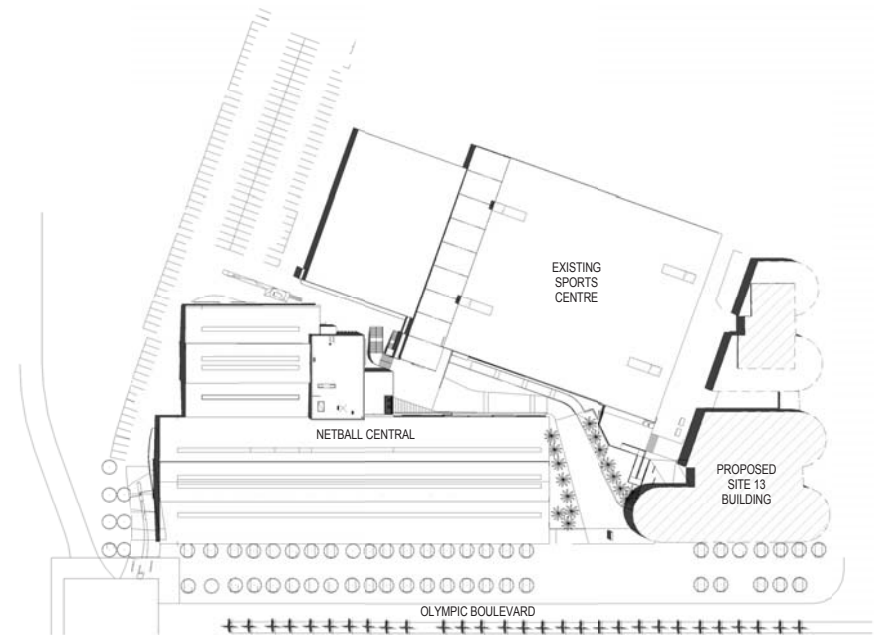
- concern regarding the close proximity of the column footing to the existing Boulevard tree roots
- a perceived weakening of the clear volume of the colonnade's form. (As illustrated in the images on page 36.)

We note that Street 2 Olympic Boulevard South [Appendix C - Street Plans and Sections] states that the western side of the Olympic Boulevard is to be more mixed in character. This will certainly be true given the varying programmes of the commercial development approved for Site 13, the Venue Forecourt, the Sports Centre, and Netball Central. However, Netball Central has been design to provide a sympathetic yet dynamic addition to the overall streetscape.



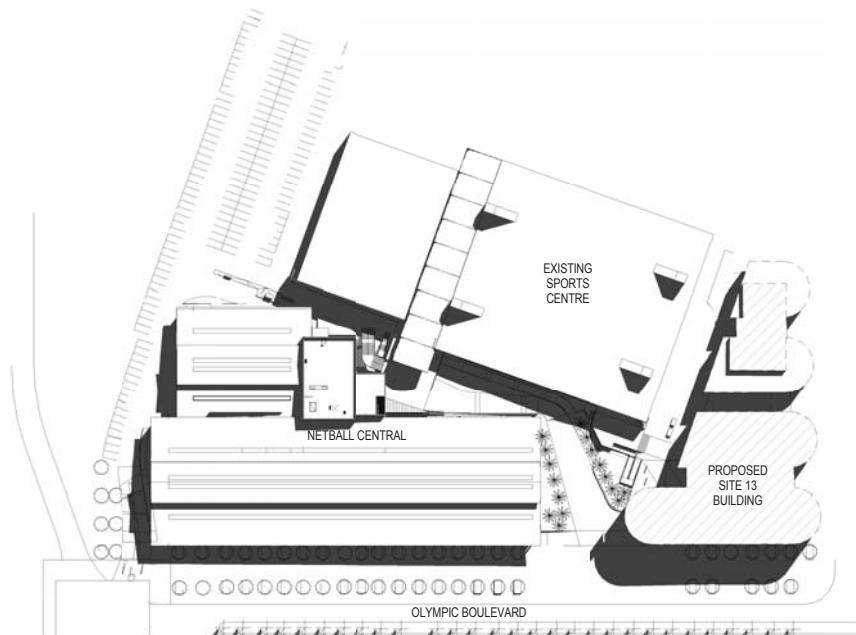


9 AM December 21



12 PM December 21

# 4 Amenity



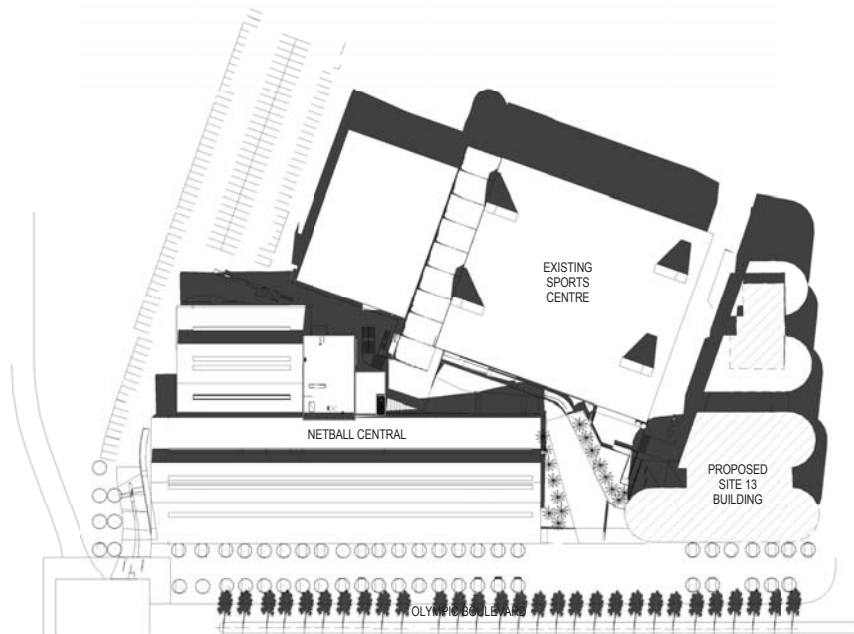
3 PM December 21

## 4.1 Solar Access / Overshadowing

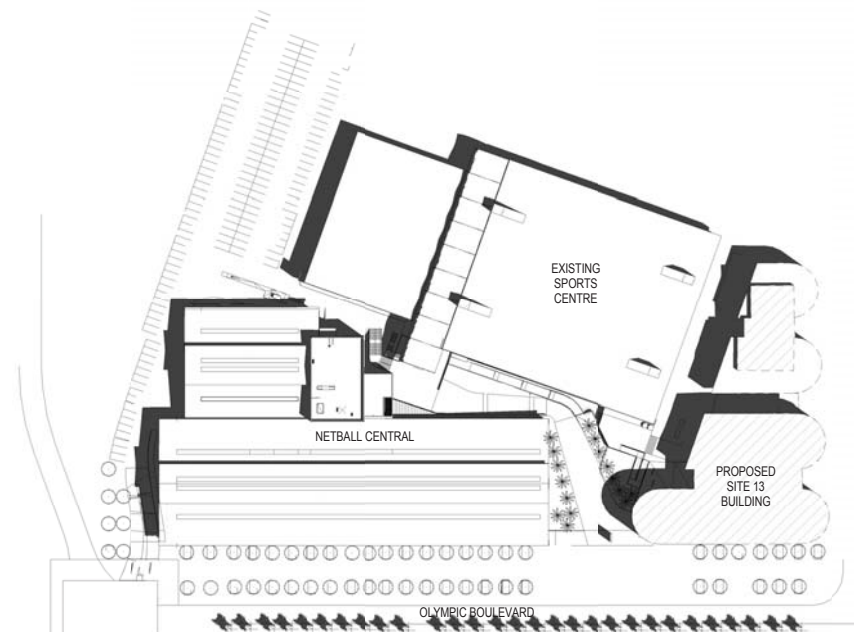
### Netball Central

The penetration of direct sunlight into the Netball Central facility has been a key consideration within the design:

- At low level on the eastern facade, glazing is inserted between fixed angled blades to allow visual links with pedestrians along the Olympic Boulevard, while preventing the trespass of early morning sun on to the court surfaces which would disrupt play.
- At high level on the east facade, sun shading screens prevent the trespass of early morning sun through the cellular polycarbonate cladding. These take the form of metal profiles that match the roof sheeting, positioned on the outside of the colonnade, thereby also enhancing the dramatic scale of this thoroughfare.
- On the north façade LVL timber louvres are positioned inside the polycarbonate cladding, again preventing the trespass of direct sun on to the court surfaces. However, in this situation the broad eaves keep the hot summer sun off the façade, while the winter sun is directed into the building to provide beneficial warming effect through solar heat gains.
- The western elevation of Netball Central's Administration offices is particularly vulnerable to late afternoon sun at all times during the year. Metal perforated screens however will restrict the penetration of this low level sunlight into the offices in order to avoid disruption to the occupants.



9 AM June 21



12 PM June 21

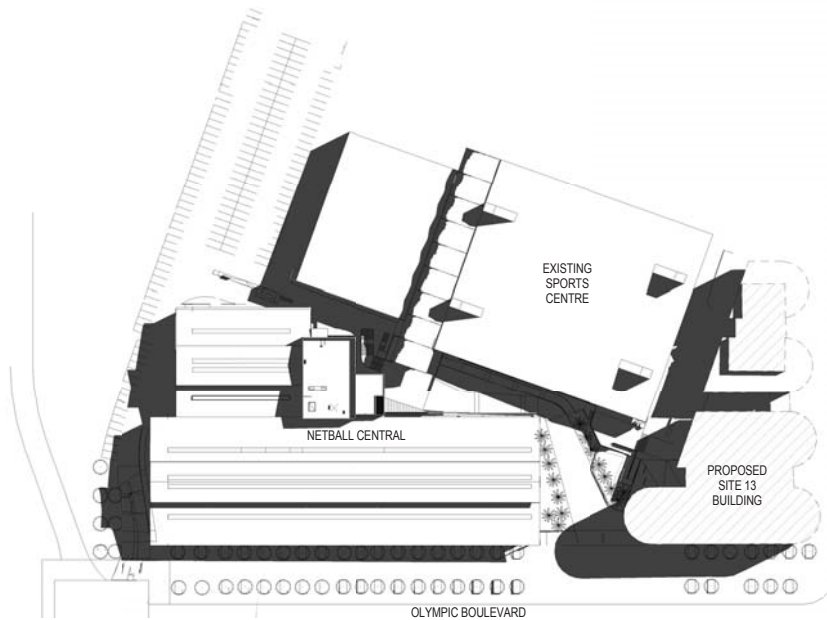


## Sports Centre Administration Offices

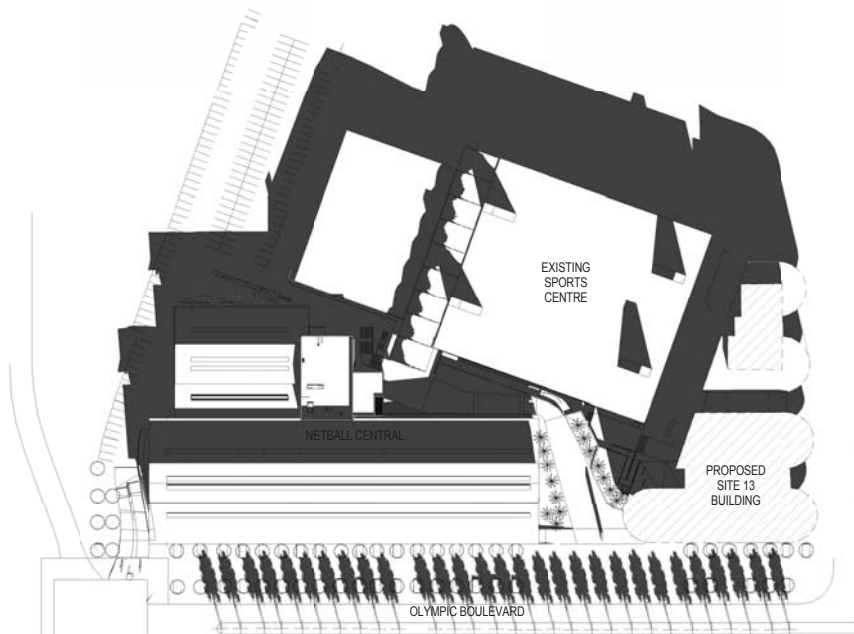
The Sports Centres' Administration offices are located along the middle level of the eastern elevation.

The design introduces fully accessible ramps to all of the venues' entrances. The ramp serving the Administration level of the Sports Centre (mid level) falls at the maximum compliant gradient, in order to maximise daylight access and visual outlook from the Sports Centre's Administration offices.

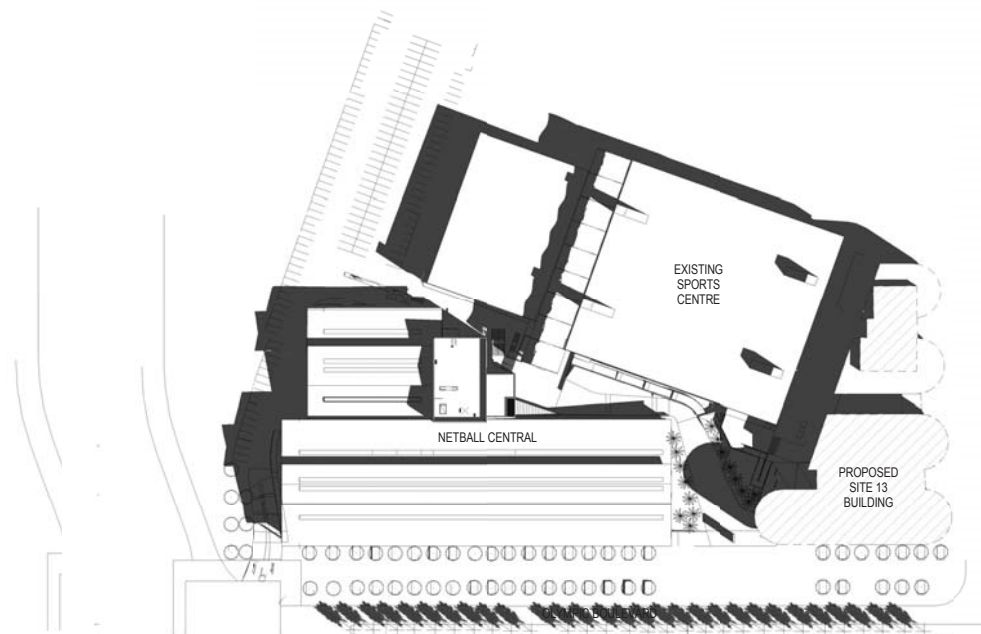
Shadow diagram analysis illustrates that Netball Central will cast shadows on the windows serving the Sports Centres' offices early morning during winter. It is noted that the angle of this early morning sun may cause glare problems for the occupants of these spaces. It has been observed that blinds are currently used extensively on the administration offices windows, which we believe illustrate this problem. Therefore, the shadowing effect of Netball Central will be beneficial to the Sports Centre's occupants, by reducing the nuisance of this low level, early morning sun.



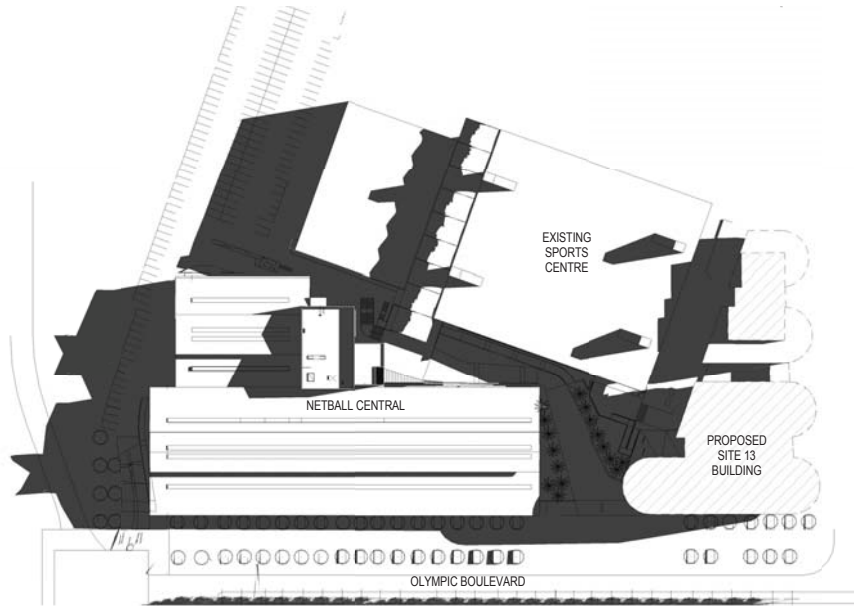
3 PM June 21



9 AM March 21



12 PM March 21



## Future Site 13 Development

It is noted that the Netball Central development will have no effect on Site 13 solar access. However, the impact of the Site 13 development on the proposed shared forecourt has been considered in the design process. The battered grass area to the southern side of the lower forecourt has been located to enable those gathering in the forecourt at lunchtime to enjoy the winter sun, rather than be overshadowed by the Site 13 development.

3 PM March 21



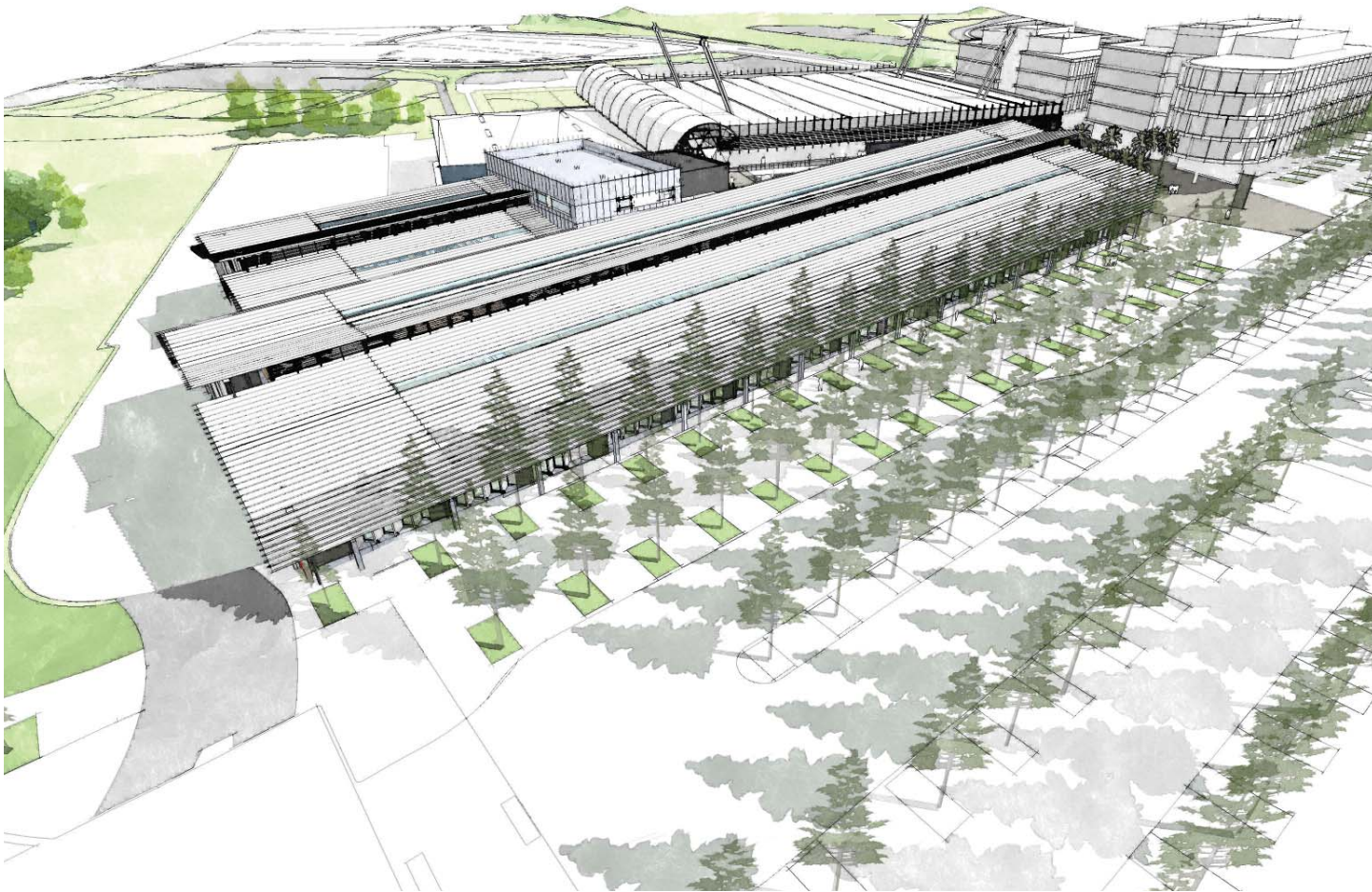


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## 5 Context Images

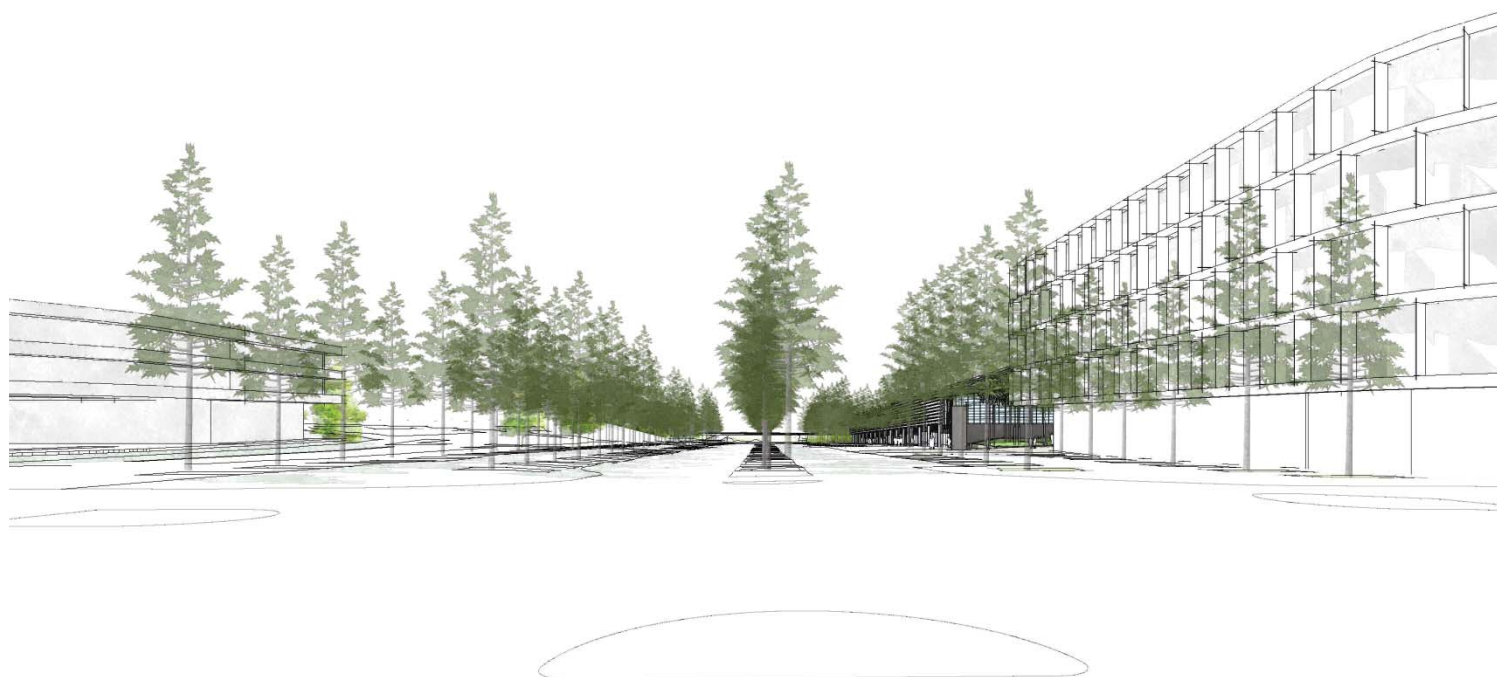
### **Note:**

The approved development for site 13 has been included with these images to demonstrate the future context.

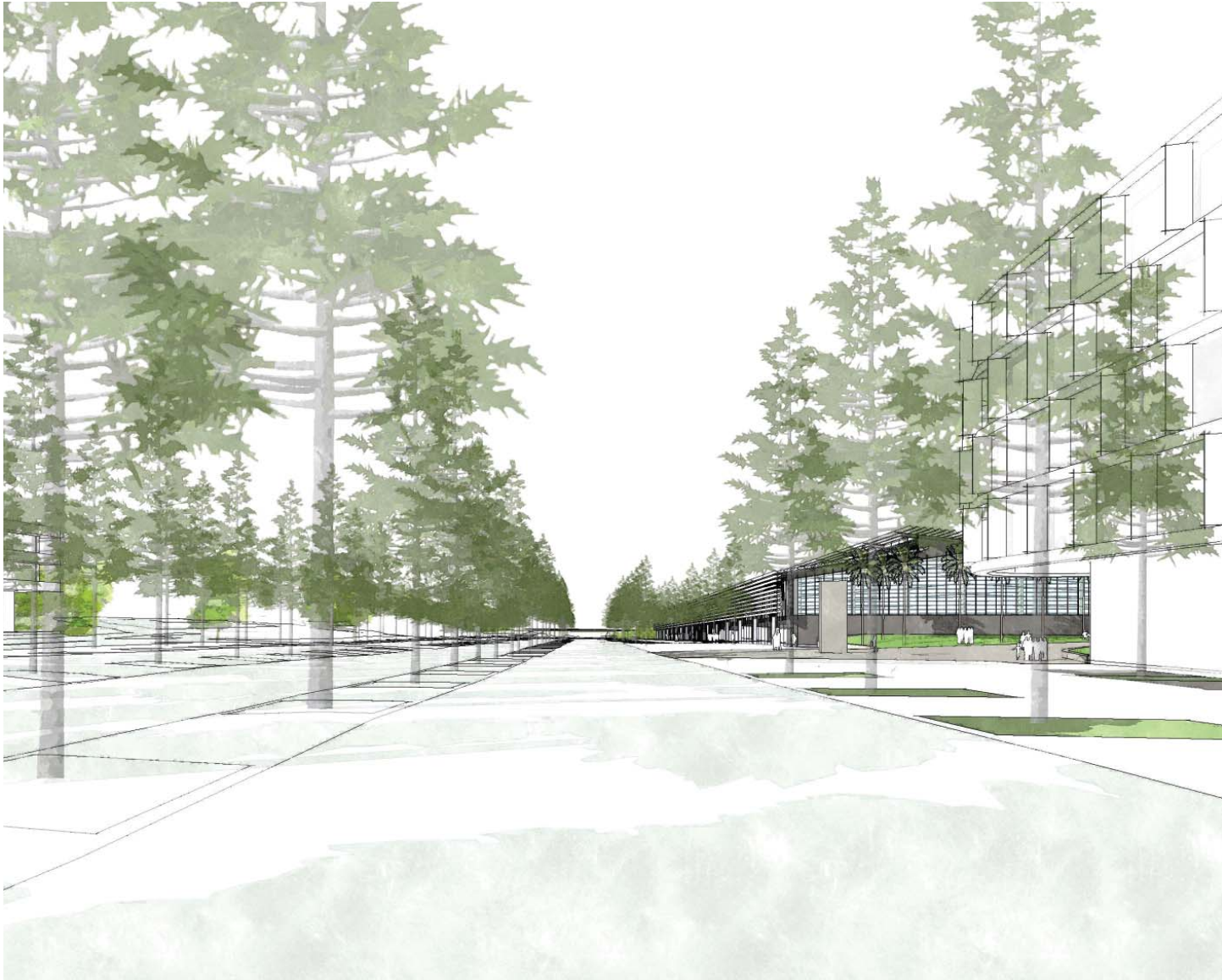


Aerial View of Netball Central





View looking south along Olympic Boulevard  
from the intersection at Sarah Durack Avenue

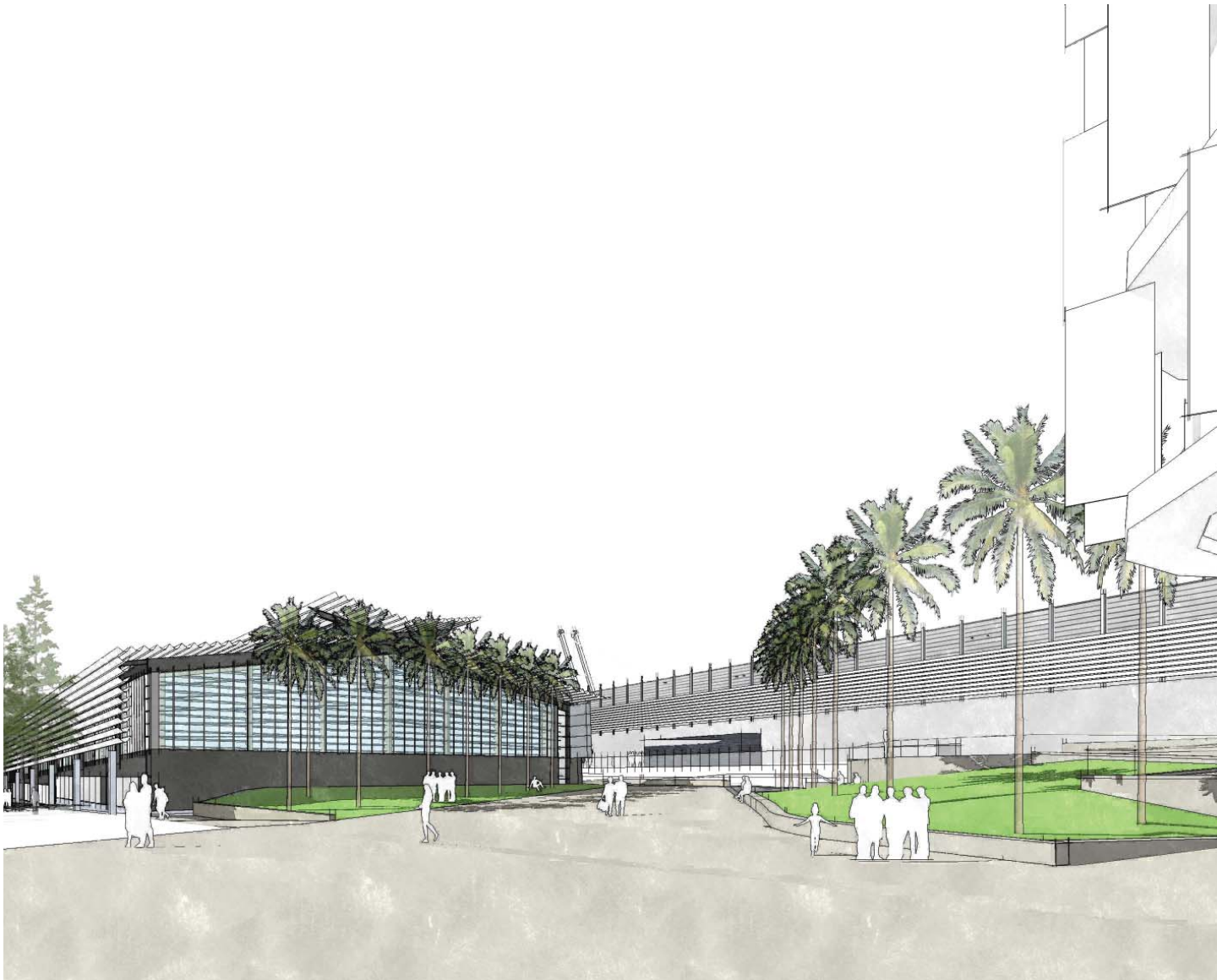


View looking south along Olympic  
Boulevard

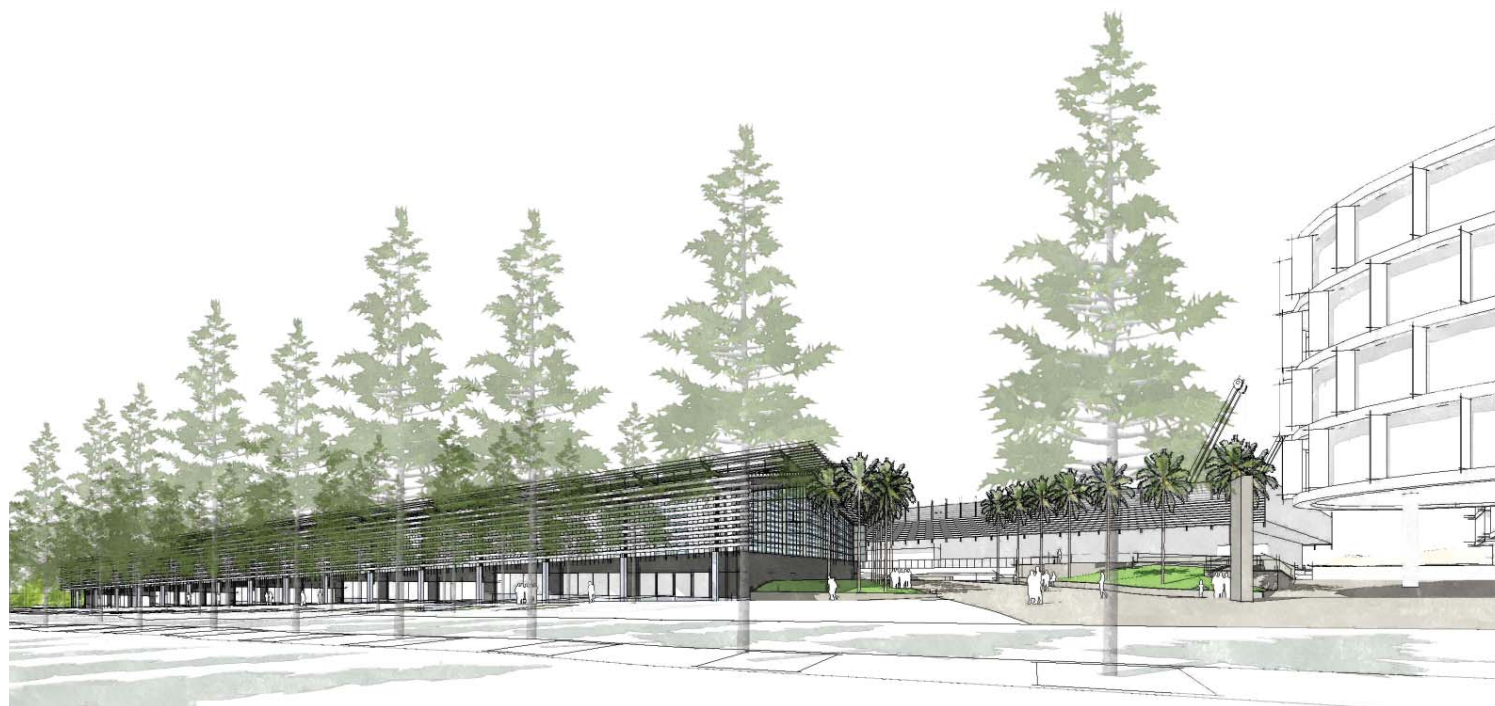


Netball Central Northern Facade viewed from  
Olympic Boulevard

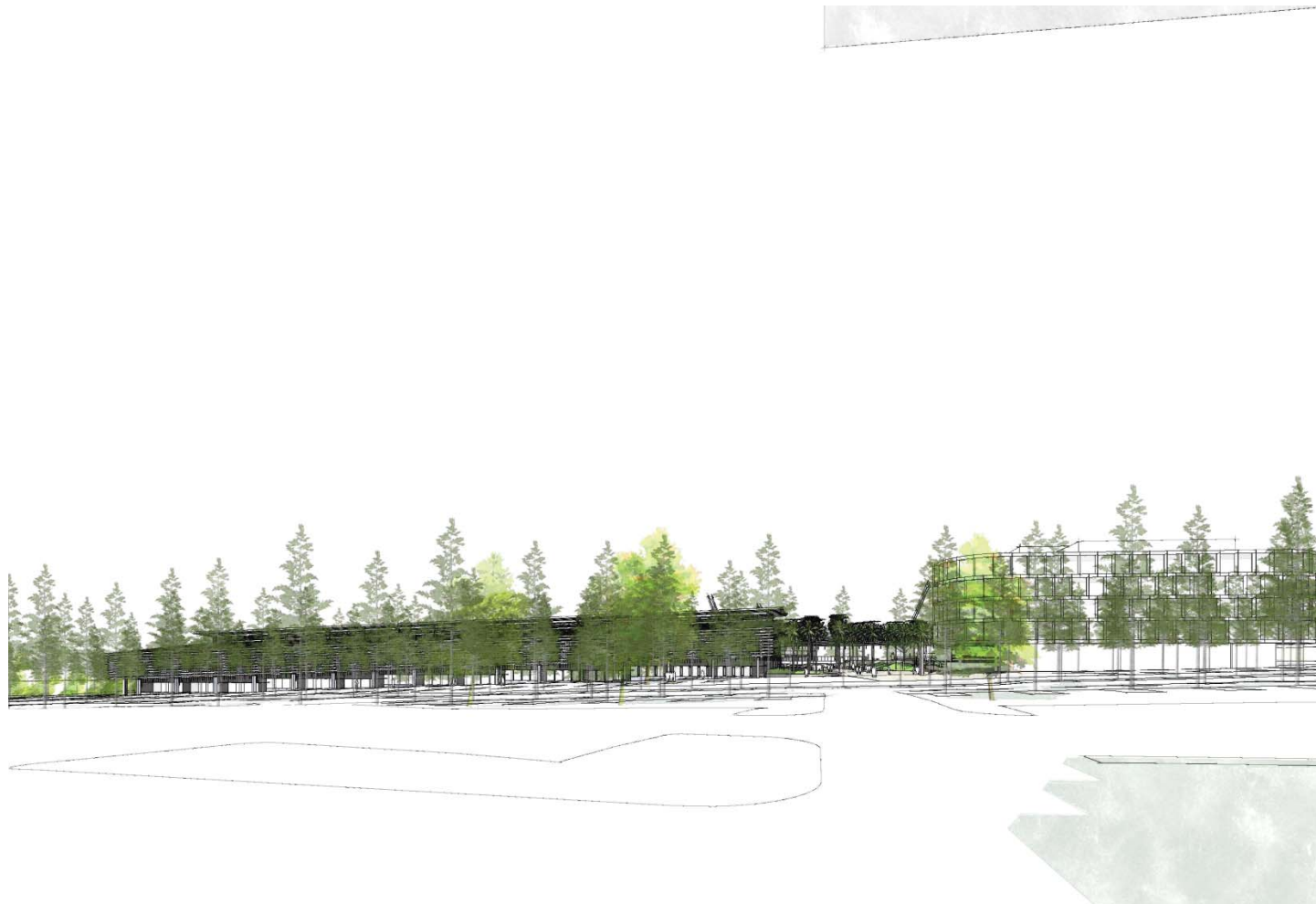




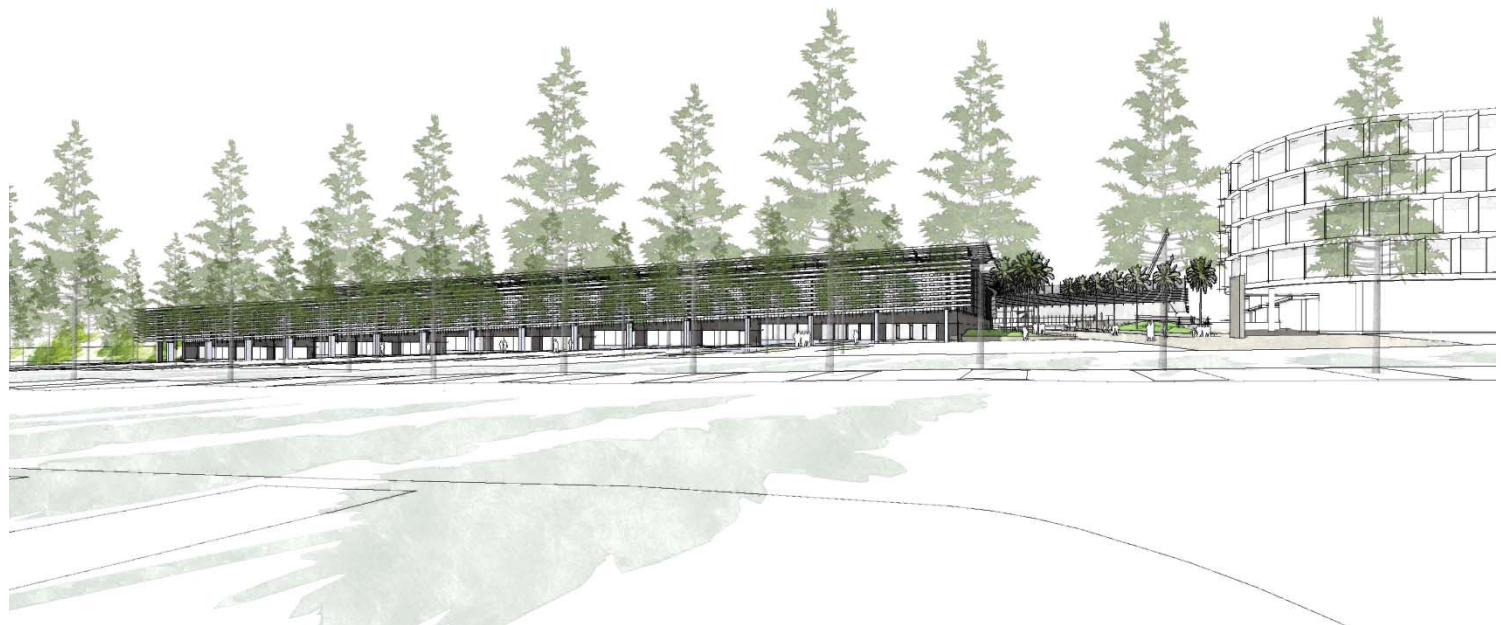
Northern end of Netball Central as viewed  
from Olympic Boulevard



North Eastern Terraced Forecourt viewed from  
Olympic Boulevard

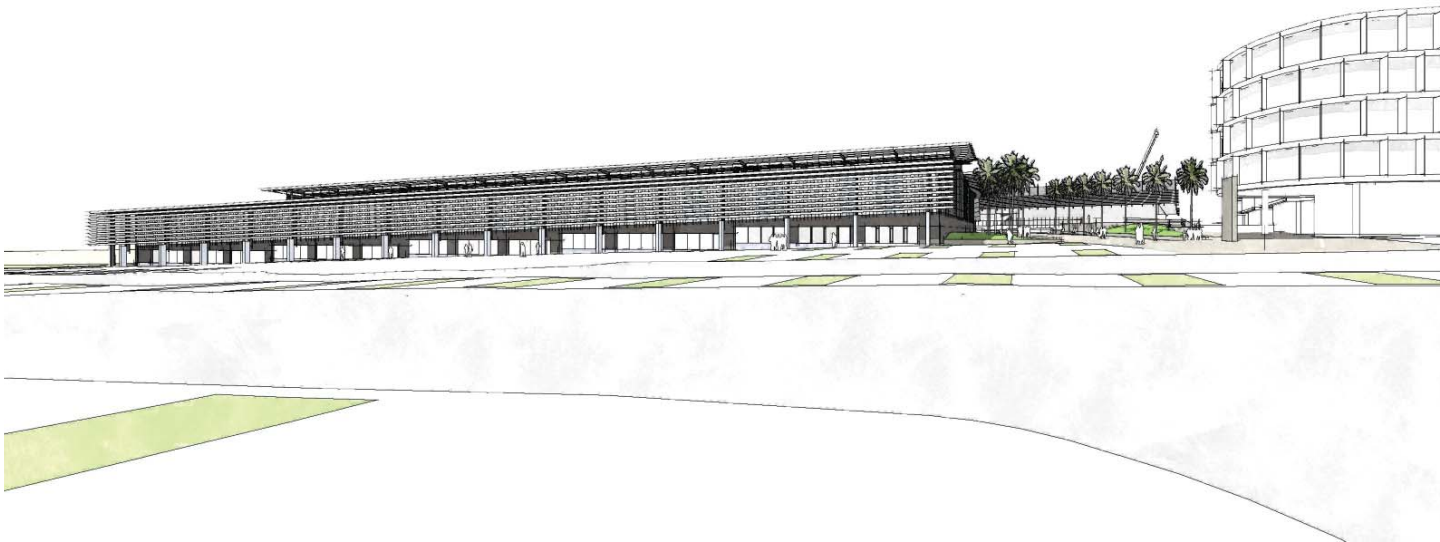


Netball Central and Site 13 as viewed  
from Olympic Boulevard

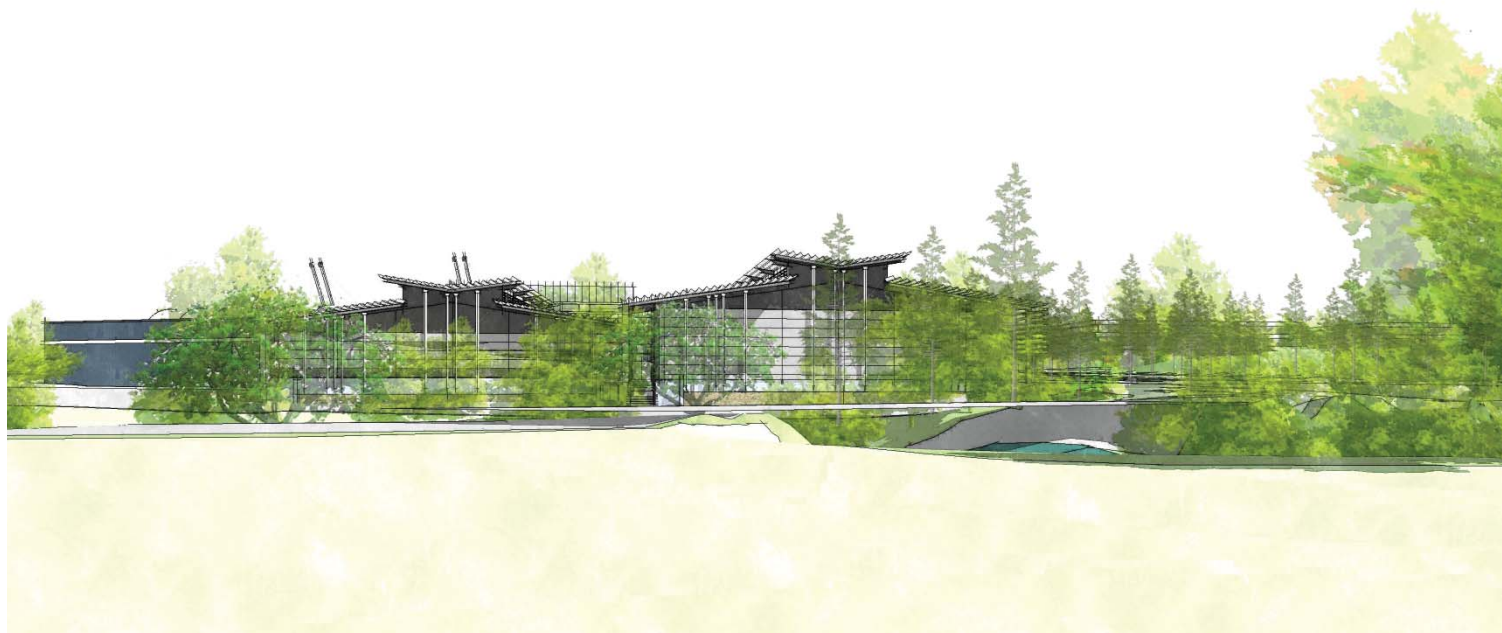


Netball Central and Terraced Forecourt viewed  
from Olympic Boulevard





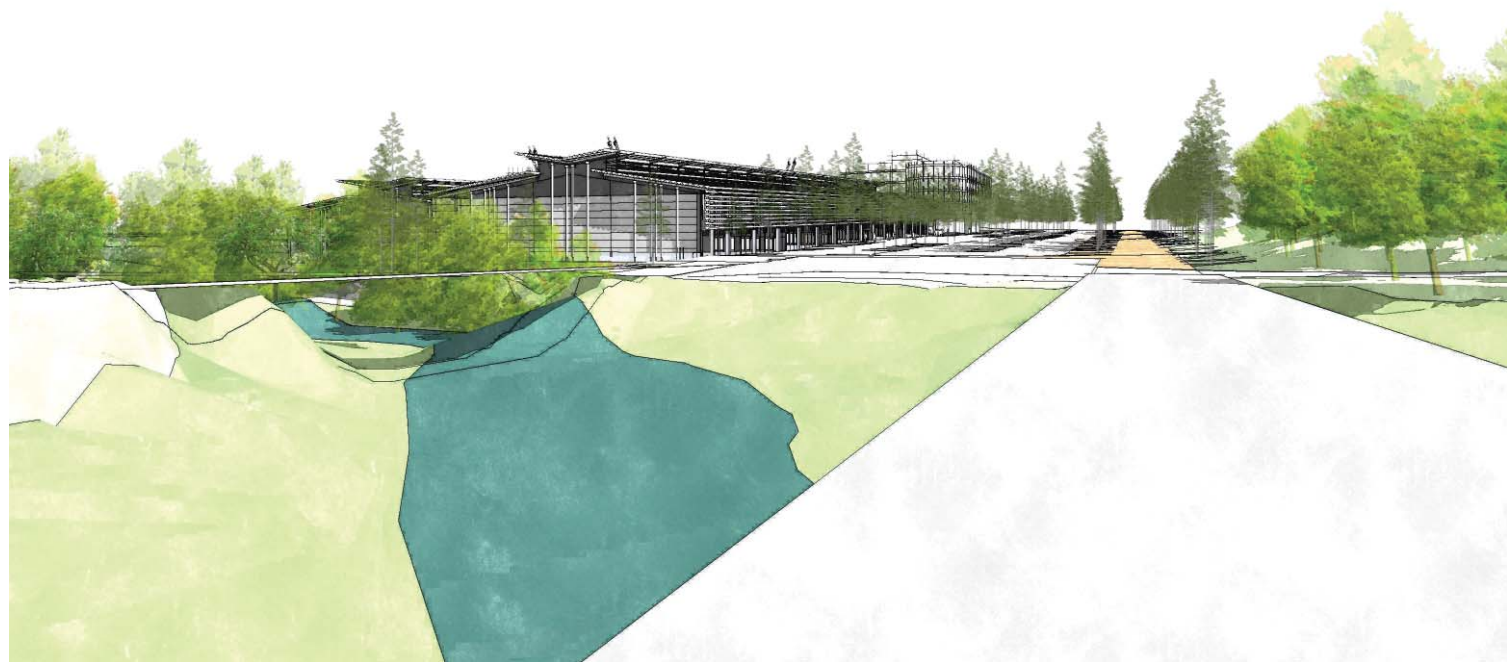
Netball Central Olympic Boulevard  
Elevation



Netball Central southern facade viewed from Shirley Street

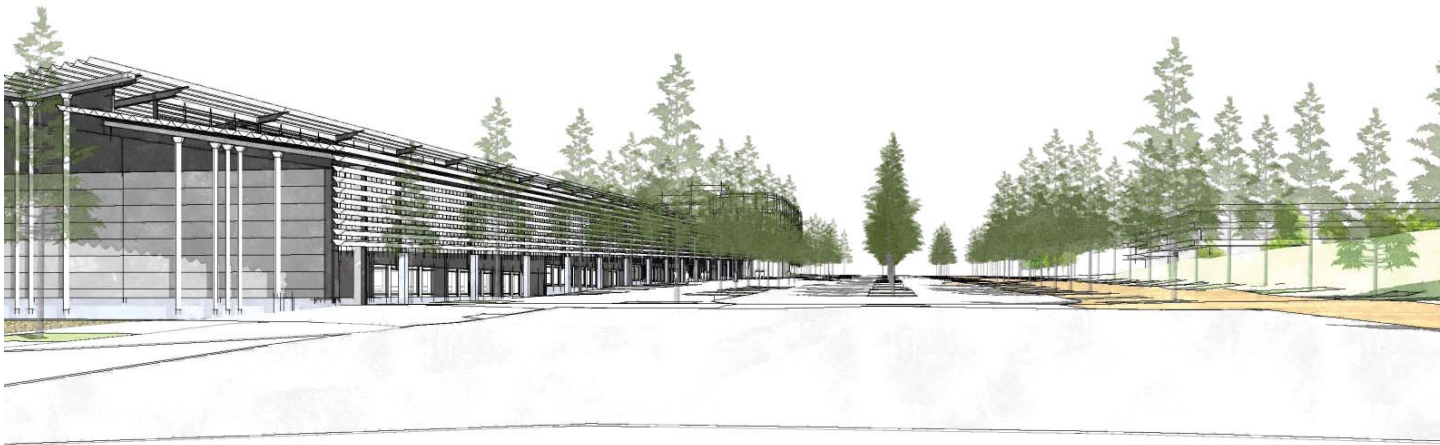


View looking north from John Bathurst Bridge



View looking north from Roy Emerson Bridge





View looking north up Olympic Boulevard  
from the intersection



Western View of Netball Central Show Court  
from the P7 Car park.

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# Appendix A

Figure 5.52. Southern Sports Precinct



Figures from Southern Sports Precinct  
Controls and Guidelines, Sydney Olympic  
Park Master Plan 2030

Figure 5.54 Southern Sports Precinct Site Boundaries Plan

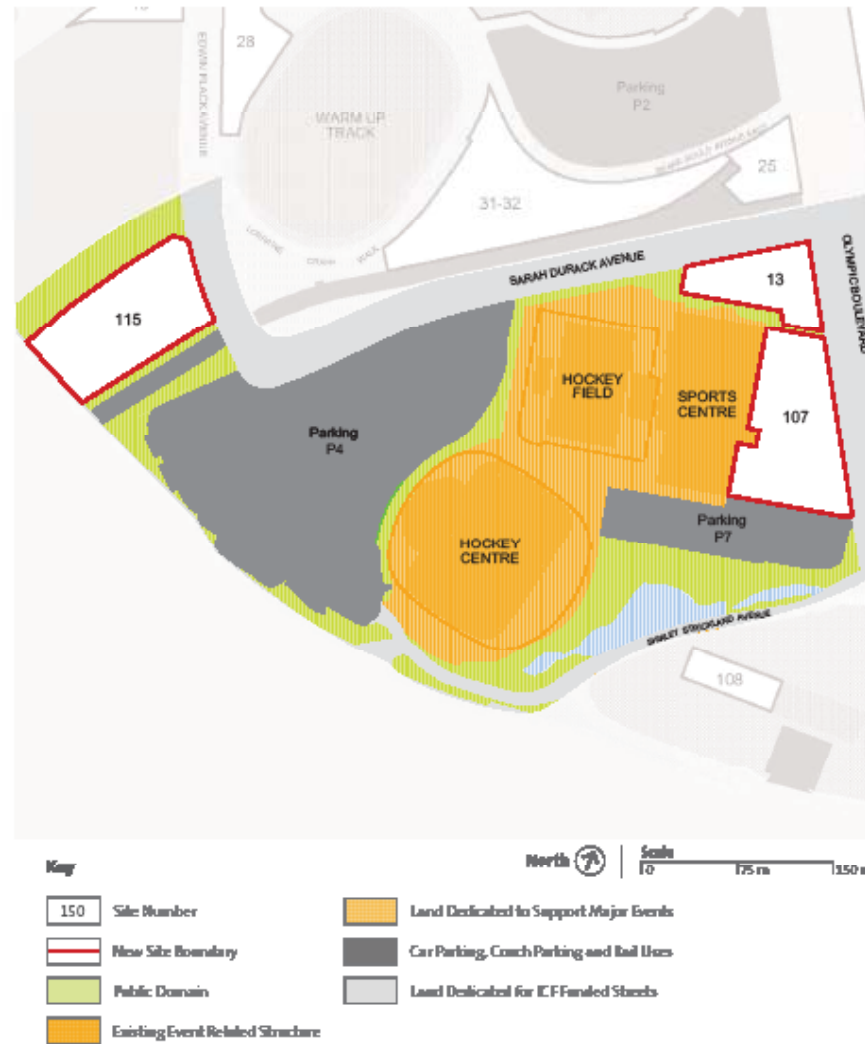




Figure 5.55 Southern Sports Precinct Site Floor Space Ratios Plan

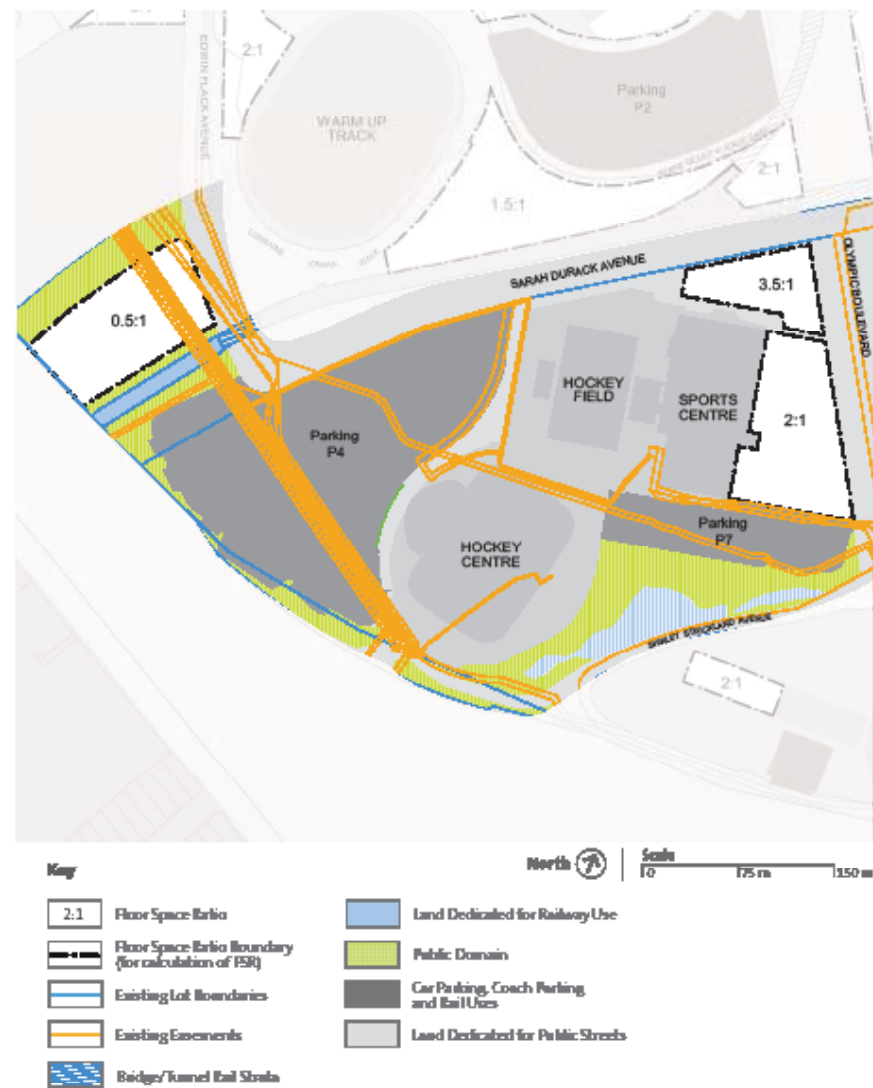


Figure 5.56 Southern Sports Precinct Land Uses Plan

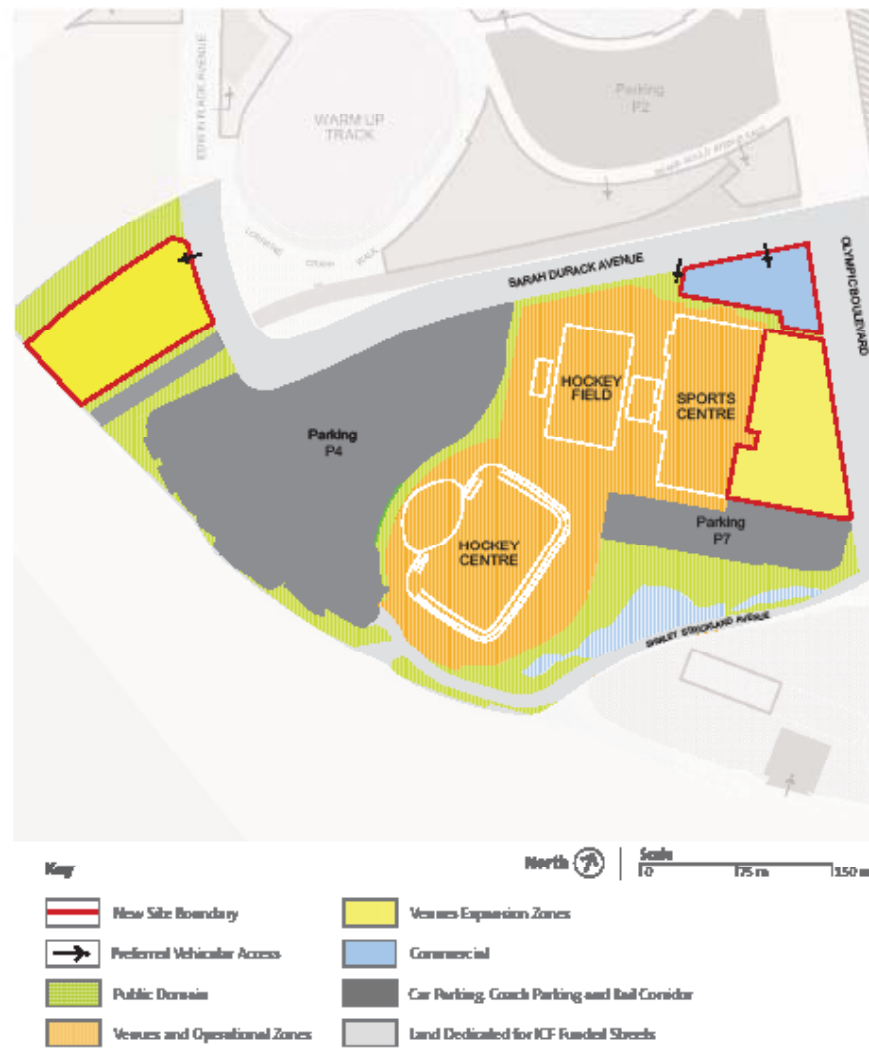


Figure 5.57 Southern Sports Precinct Building Heights Plan

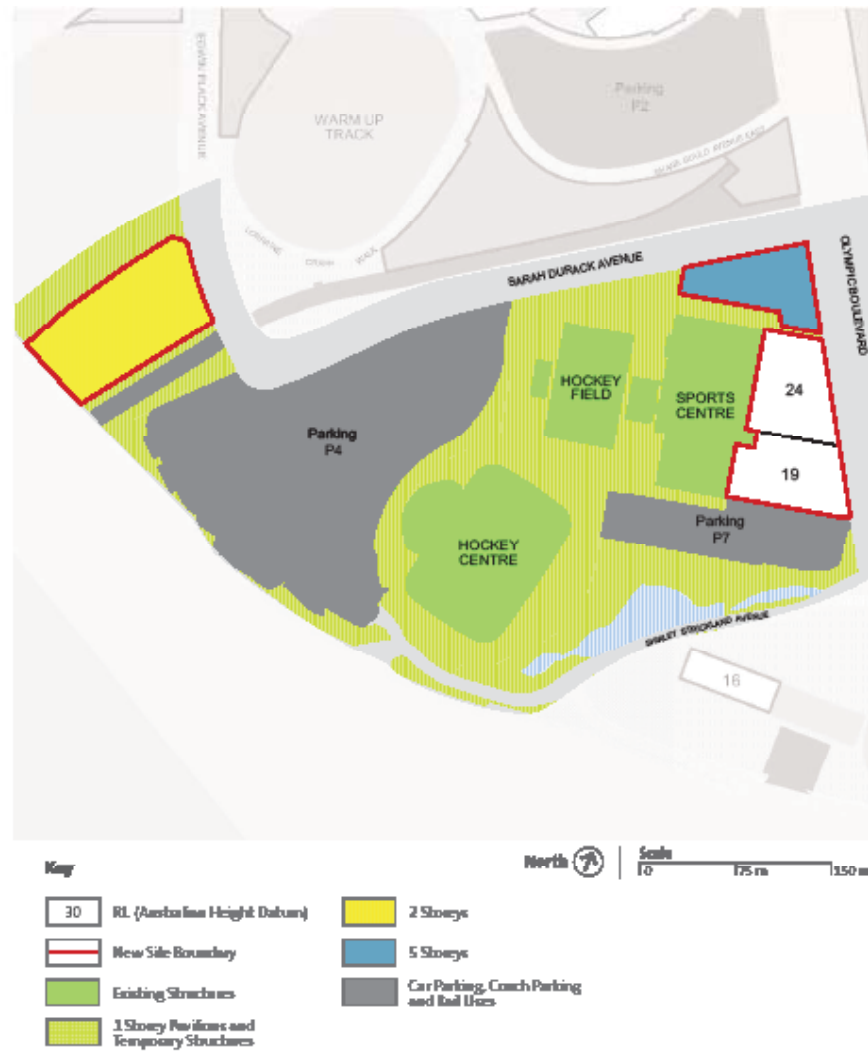


Figure 5.58 Southern Sports Precinct Building Zones and Setbacks Plan

